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Anthropology and Social Problems

The Riddle of Race

By LORD RAGLAN

THERE are many branches of anthropology, but recent events in Germany have drawn attention to one particular question, that of race, so to the question of race I shall devote the first part of my talk.

What is a race? It is possible to classify human beings in a number of different ways, by their political divisions; the places where they live; their religions; their languages; and finally by their physical characteristics. It is very important in science, and not unimportant in ordinary life, to be quite clear as to what we mean by the words we use, and what anthropologists mean by a race is a group of people possessing similar physical characteristics, or, in simpler language, of people who look much the same. A nation is a political organisation. It has nothing to do with race. A Negro born in England belongs to the British nation, but cannot be said to belong to a British race. 'People' is a non-committal term which we use for the inhabitants of a country, without reference to their race or political system. A country is simply a geographical area, and implies nothing as to the race of its inhabitants. When we speak of Spain as a Christian country, all we mean is that the majority of the inhabitants profess that religion, and when we say that it is a Latin country, all that we mean,

or should mean, is that the language of the country is derived from Latin. There is no such thing as a Latin race, any more than there is such a thing as a Christian race. As I have said, race is a purely physical term, and is used to classify people in accordance with their complexion; colour and texture of hair; colour of eyes; height, build, and in particular, shape of head. I will touch on that later, but should like it to be quite clear that we use the word 'race' for classifying people in exactly the same way as horses or dogs are classified. Of course, this is a free country, and anyone who chooses to use the word 'race' with a different meaning is at liberty to do so. If he tries to define his meaning, however, he will find himself in difficulties.

There are few people in the world who can be supposed to be of pure race. For thousands of years people have been conquering and migrating, and whenever people of different race occupy the same area they always fuse sooner or later. The only peoples of pure race today are isolated peoples such as the Eskimaux and the Congo Pygmies, and they are decreasing in numbers. Whether the world was once divided up among a number of pure races, nobody can say. The whole question of racial origins is wrapped in mystery. It is easy enough to say that the Negroes went to Africa and became black because a black skin is the best thing to have if you live in the

tropics; and that the Nordics moved into Northern Europe and became fair because fairness is best for the cold: but unfortunately that explanation will not work. A white skin may be more suitable for the cold, and a black one for the heat, but there is no evidence whatever that living near the Equator makes you black or living near the North Pole makes you white. Why were the Tasmanians not white? They had lived, probably for thousands of years, in a climate similar to that of England, yet their skin remained a dark chocolate brown. There is no evidence that the Negroes have been in Africa any longer than the Tasmanians were in Tasmania, and the blackest Negroes, those of the Upper Nile, are probably later arrivals than those of the Congo, who are chocolate brown. It is a striking fact that the Negroes with the widest noses and the thickest lips are by no means the blackest. Again, if living in the tropics makes people black, how is it that the Indians of the Amazon, one of the hottest regions of the world, are not black but yellowish brown, not very different from the Eskimaux of the North Pole? If you were to take a map of the world and plot on it the mean temperature, and then the skin colour of the inhabitants, you would find that the correlation was very slight. It is remarkable how people, even scientists, have deceived themselves on this point by considering only part of the facts.

Mankind may be broadly divided into three races, which we may call the fair, the dark, and the yellow; and the fair race is subdivided into three, the Nordic, the Alpine and the Mediterranean. We hear a great deal nowadays of the Nordics, but little of the Alpines and Mediterraneans, who are, however, really more important in the racial make-up of Europe, and far more important in Asia and North Africa. The Nordics are tall, fair and long-headed. They are found chiefly in Scandinavia, North Germany, Northern France, Northern England, and Scotland. The Alpines are short, thickset, and round-headed. They predominate in Eastern Europe, and are in the majority in Germany, France, Italy and Spain. There are comparatively few in Britain. The Mediterraneans are short, dark, and long-headed. They are numerous in the south of France, Spain and Italy, and in North Africa, Persia and India. They constitute probably a third of the population of Britain, being especially strong in the southern and western parts.

As I said, the Nordics and Mediterraneans are long-headed. So are most of the Negroes. The Alpines are round-headed, and so are most of the yellow peoples. The British Isles and Scandinavia are the only European countries in which long heads are in the majority. Nobody knows why people are long-headed rather than round-headed, or *vice versa*. At one time there was supposed to be a connection between round heads and mountains, but such is not the case. Anyhow head-shape is most persistent, and it would seem that boys take after their fathers and girls after their mothers. There are plenty of people with medium heads, but even in such a mixed population as that of Europe the number of people of distinctive racial type is surprisingly large. It is possible to pick out Nordics, Alpines, and Mediterraneans in almost any European crowd, though of course the proportion varies very much in different parts.

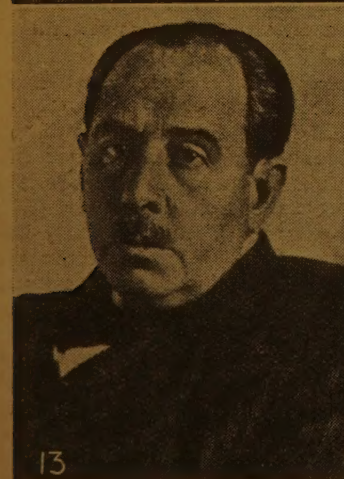
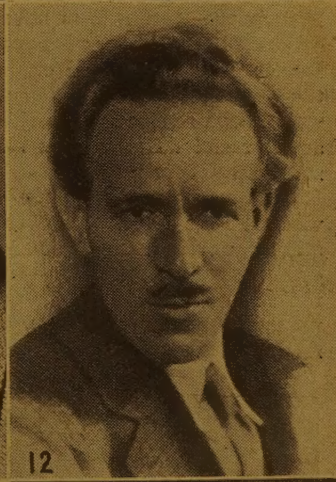
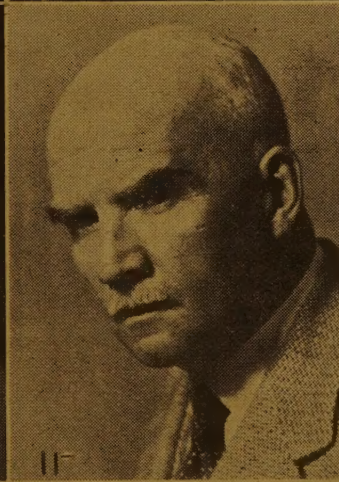
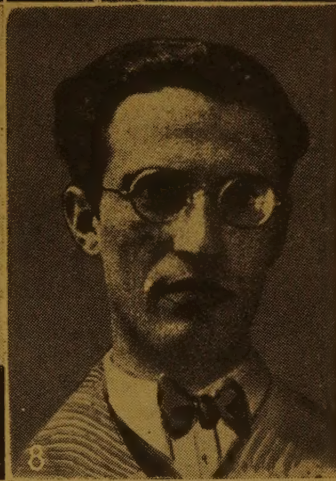
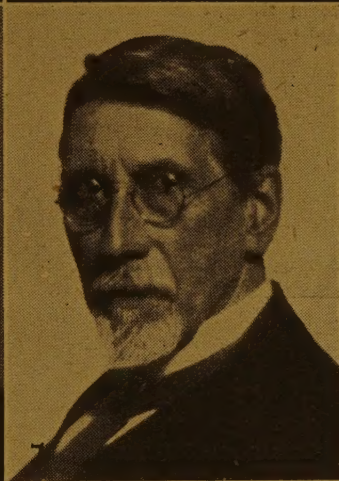
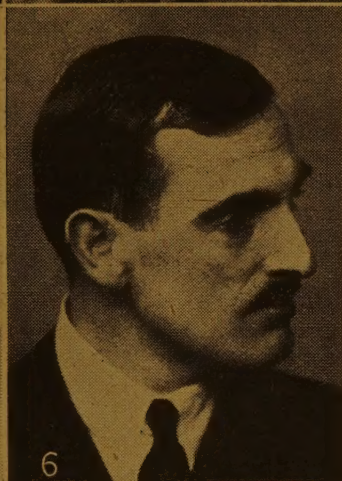
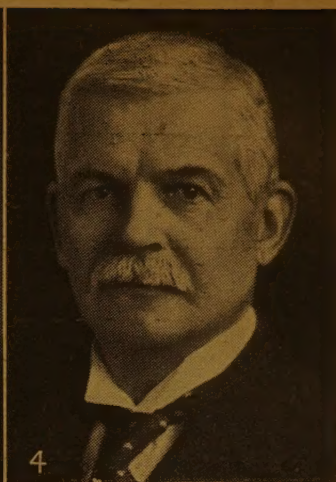
There is no such thing as an Aryan race. Aryan is the name given to a group of languages which includes all the languages of Europe except Basque and Turkish, and their relatives. Sanscrit, Persian and Armenian are also Aryan languages. The original Aryan language may have been spoken by the original Nordic race—we cannot say—but only a small minority of those who now speak Aryan languages are Nordics. Not more than one-third, and probably less, of the Germans are Nordics, and the Nordic elements in Italy, Greece and Persia are very slight. The South Germans, like the Negroes of America, speak an Aryan language, but neither belong to the Nordic race.

There is no such thing as the Latin race. The Latins were the people of Central Italy, and when they conquered half the world they took their language with them. In some regions it established itself, while in others it did not, but the Roman conquest nowhere made much change in the population. The French-speaking Swiss and the German-speaking Swiss belong not only to the same nation, but to the same race—the Alpine.

There is no such thing as the Jewish race. The Jews are racially very mixed. Statistics show that only about a quarter of them have the so-called Jewish nose, and this form of nose is not Semitic at all, that is to say that it is uncommon among Arabs and other speakers of Semitic languages. It is a characteristic of the Eastern branch of the Alpine race, and the Jews probably got it from the Hittites, who belonged to the Alpine race and spoke an Aryan language.

The Celts are not a race. The Celtic language probably came into existence among a federation of Nordic and Alpine tribes in South Germany somewhere about B.C. 1200. These combined tribes conquered and imposed their language on most of Western Europe. It was later replaced for the most part by Latin or Anglo-Saxon, and in the parts where it has survived the racial elements are very different. In Brittany the Celtic-speakers are mostly Alpines, whereas in these islands they are mostly Mediterraneans. I shall return to the Celts presently.

Since the Aryans, Latins and Celts are linguistic and not racial groups, and since the Jews are a religious and not a racial group, it is obvious that these groups cannot possibly have any racial characteristics. It seems, moreover, to be extremely doubtful whether the real races, the Nordics, Alpines and Mediterraneans, have any racial characteristics other than their physical ones. Attempts have been made to prove that the Mediterraneans are quick-witted but fickle, that the Alpines are plodding and stingy, and that the Nordics are enterprising and ambitious; but these and all similar theories are based upon a few selected examples rather than upon a study of the facts as a whole. The whole idea that there are innate mental differences between people of different races is based upon prejudice rather than upon fact. This applies not merely to alleged differences between European races, but to alleged differences between whites and blacks. Intelligence tests carried out in Australia and South Africa have shown that black children are not inferior in intelligence to white children. These results have caused some surprise, but there is no real reason why they should. Intelligence in children is the result of quick sight and quick hearing. Every child born with good eyes and good ears is born intelligent, though in most cases it is soon made stupid by disease, dull surroundings and dogmatic teaching. So-called racial differences, so far as our evidence goes, are merely differences in upbringing. Nationalism exists and thrives on the entirely false belief that these artificial, and often indeed non-existent, differences are innate and unalterable. Ardent nationalists are generally people who are eager for an excuse to hate and despise other people, but even the most ardent nationalist cannot pretend to recognise his co-nationalists without first speaking to them, as of course he would be able to do quite easily were there any real connection between nation and race. If anyone thinks he can tell Englishmen from Frenchmen or Germans by their looks, I should advise him to get a friend to hide what is printed under a dozen portraits or groups in the illustrated papers, and try to guess where the people come from. Even if he guesses right, which he most probably will not, he will find that his clues are cultural rather than racial. There are, of course, dress and the mode of wearing the hair, but quite apart from these we find that religion, language and occupation all tend to leave traces in the facial expression, and these may easily be mistaken for racial traits. Thus, for example, the



Can You Guess their Nationality?

These sixteen photographs represent two Germans, and one each of the following: American, Australian, Austrian, Belgian, British, Danish, Dutch, Finnish, French, Italian, Norwegian, Polish, Russian and Spanish. (When you have made your guess, turn to page 583 where you will find a key)

habitual use of the French language tends to induce a slight pursing of the lips. A Muhammadan has usually a resigned, rather fatalistic, expression. It is far easier to mistake a Pole

castes are predominantly Mediterranean, with here and there well-marked pockets of Alpines. Nordics occur, but are rare. The aboriginal tribes contain a strong negrito element. The negritos may be described as dwarf Negroes. The lower castes appear to be a mixture, in varying proportions, of Mediterraneans with earlier black or dark brown races. These conclusions tend to confirm the view that the founders of Indian civilisation were akin to the Sumerians and Egyptians, the Aryan-speakers being later intruders.

Professor Hill, in his paper on the Veddas, the supposedly primitive inhabitants of Ceylon, told us that they were so much interbred with the Sinhalese that pure-bred Veddas are rare. In the discussion which followed several speakers put forward the view that the Veddas and other so-called primitive races are really nothing of the kind, but are the descendants of more or less civilised people who have fled or been driven into forests or deserts, and who, owing to poor food and savage surroundings, have degenerated both physically and mentally. Those who



If you weren't successful with the individual faces on the previous page, try your hand with these crowds, each belonging to a different nationality*

Group A

for an Englishman or a Greek for a Frenchman than it is to mistake a general for a priest or a lawyer for a farmer. If people would only keep their eyes and their minds open, they would soon realise that all this talk about racial differences is for the most part sheer nonsense.

I cannot claim that all the views which I have just put forward are strictly orthodox—there is little orthodoxy in anthropology—but in their broad outlines they represent the views of a large body of scientists. At the recent meeting of the British



Group B



Group C

Association there were not many papers on this branch of the science, but what there were tended to confirm what I have been saying. Dr. Guha described a careful statistical study of a number of selected groups in India. This showed that the upper

the introducers of iron. Unfortunately no such correlation can be made, and there is no general agreement as to which out of many waves of settlers or conquerors brought the first Celts. While

(Continued on page 585)

*Key will be found on page 583

Poverty in Plenty

By GRAHAM HUTTON

Mr. Hutton, who is Assistant Editor of 'The Economist', outlines in this introductory talk the problems and questions which will be discussed by economists, bankers and sociologists in the course of the series which he is editing on Poverty in Plenty

TODAY, the plain man walks about with his head in a veritable mist of disputes over economic affairs—disputes between politicians, political parties, employers, workers, cranks, and, last but not least, between economists themselves. Out of the mist the plain man's voice comes: 'I may not know much about economics, but I know when I'm well off and when I'm not. And at present I don't seem to be well off!' Thereupon, all the disputants set on him: one points out how well off he is compared with his great-great-grandfather; another shows him how badly off he is compared with his employer; one politician tells him he has lost relatively less than the investors; another tells him he could be twice as well off—or, probably, one-half as badly off—if only he collared the investors' control of the industrial machine; one economist writes a book to prove that lowering wages will, by what appears to the plain man as a dubious bit of trickery, make prices go down even quicker than wages, so that the community will be able to buy more goods for less wages; another economist writes a book to prove that what is needed is higher wages and higher prices. No wonder the plain man holds his head in his hands. Seeing vast disparities of wealth around him, and unemployment existing alongside the wholesale destruction of much-desired commodities, he generally plumps for the politician and the party which promises most. And he plumps for the analysis of the economic problem which seems the most obvious, or the most attractive.

But there's the rub. Would any of us really take our oath that the most obvious explanations are, even in the main, correct? In matters of economics, our everyday experiences might lead us to suppose that because B follows A, it must be caused by A. Yet both B and A, as well as the order of their appearance, may be caused and controlled by some factor lying outside both, or all, of them. While, therefore, the plain man, the worker, the politician, the employer, the investor, the lawyer, and the civil servant are all vitally interested in the working of the economic system under which they all contrive to make a living, the economist is particularly concerned to find out the *principles* according to which the economic system works.

Discovering First Principles

Now here we strike the first difficulty which besets the economist. The economist will probably say that he is trying to build up a body of knowledge which will enable men to make the best use of their resources, and so to increase their material welfare. Yet he has to deal with the activities of millions of men, organised in great groups called nations, living under widely different systems of law and government; and the activities of these millions of men can never be probed by the economist in individual cases. The economist must therefore do what every scientist does: he must 'abstract' from the millions of individual events or objects or 'cases' just those elements which are common in all the cases which he is going to study. That is to say, the economist is concerned to discover the principles by which men secure their own material welfare in creating material welfare for others. The economist wants to find out the principles by which all of us, in all civilised nations, live by exchanging our goods and services for the goods and services of others—how and why it is that the labourer, the farmer, the miner, the doctor, the film actor, the brewer, the investor, the banker, and the Prime Minister, can all make a living by the system of exchange. We know that if, in this year of grace 1934, we all sat down in our own homes to grow our own wheat or potatoes, to make our own clothes or boots, and to brew our own beer or raise our own tea, we should have a standard of material well-being lower than in the England of the Middle Ages. For we are vastly more populous today than we were then; and though we have made great strides in the technical processes of production, these would be barren without the possibility of importing goods and raw materials from other countries in return for our own specialised services or manufac-

tures. We in the modern world, therefore, have only achieved, and can only maintain, our relatively high material standards—even the lowest of them, those of the unemployed—by the complementary principles of exchange and of division of labour, or specialisation.

But this exchange and specialisation means markets; and markets mean terms upon which the exchange is effected; and the terms will vary with the relative strengths of each party's desire for the other party's goods or services. And so, before we know where we are, we are bang in the middle of economics, with the market, prices, and the so-called laws of supply and demand.

The economist observes the activities of millions of men—workers, savers of capital, organisers of enterprise, framers of laws, bankers—and he sees them as busy in the bringing of all kinds of goods and services to all kinds of markets, where they are exchanged, at all kinds of prices, for money which has only in its turn been obtained by previous exchanges of goods and services in other markets. For example, the money handed over for food in shops and stores has only been obtained by the selling of the workers' services; that handed over to the bookmaker at 'the dogs' or the Derby has come either from wages again, or from salaries, which are another form of wages, or from investments, which are the savings of someone in the past who might, himself, have 'blewed the lot' at the time. Now, it is fairly clear that the economist cannot deduce from his study a vast set of laws which will be rigidly applicable to any given individual cases; for the individual's actions can never be predicted. The economist can, however, discover—and has, in fact, discovered, as we shall see in this series—certain principles which the millions composing a nation or an industry follow or exhibit in their common economic activities. The economist then puts in order his discoveries of these general tendencies, and, by testing his constructed theories by observed facts, he can perfect a body of knowledge about the economic system as we know it.

Putting Economic Theories to the Test

But here I must issue a warning. Do not run away from what I have said with the notion that, simply *because* the economist must study the economic activities of millions of men, his deductions are doomed to frustration by any and every change in laws, methods or organisation. Quite the reverse. Often enough, some great and far-reaching change in law or in technical methods of production or in the very nature of society itself, simply confirms the economist's analysis of some crisis or problem. Once he has been able to establish the necessary elements of his study—that is, the presence of an exchange economy and of the factors of production—any social or technical change must exert its influence upon one or other of these. Either it will prevent exchange from taking place, in which case the market will be narrowed and factors of production will be lying idle awaiting increased uses for other markets; or it will not prevent the fact of exchange, but it will have its full effect on one or other of the factors of production themselves. In either case, the economist will be able to analyse, as well as to explain the situation; and he will, in addition, be able to check and perfect his own set of principles and his apparatus for analysis.

All this may sound highly abstruse, and remote from reality. Actually it is not. It is precisely what has been taking place during the last twenty years. The shattering experience of the War, when vast quantities of human labour and capital were simply blown to bits, and the great social and technical changes of the post-War epoch, have made it possible for economists to test their theories and principles by watching human errors and experiments on a vast scale, and in laboratories as wide as nations or the entire world. Finally, the Great Depression of 1929 and onwards has offered as many experiments in palliatives and so-called solutions as it has created the vexed problems which will be analysed in this series. From all this the economist has been able to gain fresh knowledge. He has even been asked to offer advice. Some-

times, as in Austria, Australia and Sweden, Governments have drawn up programmes on the advice of economists, and the incidence of depression has been alleviated. In other cases, notably the United States of America, economists have advised plans only for certain specific problems in the whole nation's crisis; and as a result, the programmes drawn up have been of a conflicting nature, for there has been little co-ordination evident. Currency schemes, agricultural restriction plans, industrial wages and hours codes, have all conflicted at various points, and notably in the realms of foreign trade and of costs and prices. In these markets, friction has occurred, and so the schemes have not seemed smooth in working. But, on the whole, the economists have been so busy on perfecting the principles of their study, and on checking their theories or hypotheses by the extraordinary facts in the depressed world about them, that the plain man has been more struck by their differences of opinion on various fine points of method or of analysis than by the vast amount of common ground, over which discussion between economists seldom ranges.

'Money is What Money Does'

Economics, then, is the study of the principles by which any country's resources would be most efficiently used, so as to secure the greatest real income in return for expenditure of effort. The resources of the country will be its factors of production—its natural resources, like land, its labour force available, and the capital available for use as apparatus of production. The process of production is directed to fashioning goods or services for exchange; exchange is effected by money, or some equivalent instrument; and it follows that, the less waste occurs in the combining of the factors of production, the more factors will be left available for fresh production, to swell the national income. The use of money in exchange should not blind us to the fact that 'money is what money does'—that is, the money is spent again, either on consumption goods, or on apparatus for future production, which we call capital goods, like railways, machinery, and factories. Therefore the actual sums of money obtained in exchange mean little by themselves. What matters is the prevailing level of prices when we go to spend those sums.

Here emerges the economist's distinction between 'money income' and 'real' income, *i.e.* what the money will command in the market at the prevailing level of prices. If the general price level is rising, those incomes fixed in terms of money will buy less, but debtors will have greater returns with which to pay their fixed indebtedness. If, on the other hand, prices are falling, fixed incomes will purchase more goods, but debtors' sales will realise less money, and they will find it harder to pay their debts. Thus, we are led to examine the market; why it is that both demand and supply can vary, and why prices can vary with them. Moreover, we must note that, as demand is expressed by money in most markets, alterations in the supply of money itself will alter demand, and so will affect prices, and the general price level. So we are led on to examine, on the one hand, the nature of demand, and on the other hand, the influence of changes in the volume of money and credit, which is only another form of money.

But by far the most important consideration in exchange is the question of costs. Whether private persons, or big public corporations, or finally, as in Russia, the State itself, undertake the risks and organisation of production, there are obvious costs—the paying of wages and of raw material suppliers before the goods are finally sold and paid for; the cost of the plant and machinery; the cost of transport and marketing. Under private capitalism, the industrialist or the farmer bears these costs—either directly as a person, when it is his own capital upon which he operates, or indirectly, when the 'industrialist' is really a big joint-stock company composed of innumerable shareholders and the board of directors appointed by them to supervise the running of the concern. The main economic principles of costs are evident wherever there is an exchange economy; it is only the forms of those costs which will alter.

What are Costs?

But what *are* costs? I can hear someone ask. Well, once again, although money measures them, money is not the cost; the costs are the sacrifices necessary to production—sacrifices of time, of labour, of saving instead of spending, of using land for corn instead of for a house. Reckoned in money these

costs represent how much money is necessary to get, let us say, labour for building rather than for coal-mining, or to get enough saving instead of spending in order to construct new machinery, or to get land for a factory rather than for pig-farming. The money is the demand by the entrepreneur, whether he is a man or a concern, for some particular factor of production for some special use. And as there will be other entrepreneurs also offering money for other uses of the same factors of production, there emerge markets for each factor—the labour market, the capital market, the markets for raw materials into which, in their turn, labour and capital have already gone. You will probably see that, whether the entrepreneur who demands factors of production for any particular use is a man, or a limited liability company, or the State itself, does not affect the general economic principle of costs. For the cost is simply the cost of assigning a factor of production to one use instead of to any of a thousand others. And such costs will be incurred by the State, if the State decides to become a producer.

What, then, enables the entrepreneur, who finally secures the factor of production for his special purpose, to outbid the others? That brings me to profits. The entrepreneur, whether a man or a concern or the State, must keep himself by his efforts to make a profit. And he does not know he *will* make one. Plenty of them make losses—including municipalities and States. But he borrows capital from private savers and plans production in the hope of a profit, over and above all his costs, including the interest on the capital he has borrowed. Averaged over a period of ten years, his profits will look more moderate, for slumps will have wiped profits out for a time. They may even have wiped out the entire concern and the investors' savings. But the most efficient entrepreneurs in one industry survive and draw together; and then emerges the problem of domination of the so-called 'free play of the market' by a giant trust or cartel. Instead of demand controlling supply, supply appears to control demand, by restricting supplies and by 'rigging' the market. Then prices cannot follow the free interplay of demand and supply; the price of this given commodity is maintained above what it need be, given full and efficient use of the factors of production. That means that out of the consumers' incomes more is taken for the commodity than need be, and less is left for spending in other directions. The economist makes a note that the price-structure is becoming distorted. Perhaps in the end the consumers hold off altogether; the price falls, and drags down other prices; the number of unemployed rises; incomes are curtailed; banks fail; and a crisis supervenes, followed by a painful period of readjustment until all production is once more freely working at full capacity in the most efficient units, with the most efficient utilisation of the factors of production, for the purposes which best 'pay' for that production.

Three Divisions of the National Economy

The economic stage at which the Western World has now arrived is most interesting; for each country's national economy is now divided into three. The three divisions are these: first, there is the remnant of the old 'free market' economy, composed of individual and competing concerns, working for markets where consumers can express their choices freely in the prices they are able and willing to pay. Secondly, there is a semi-rigid division, in which giant industrial concerns hold virtual sway over their particular markets, controlling the quantities and qualities offered, and strong enough to prevent competition and so to compel consumers to buy their goods or none at all. Then, thirdly, there is a rigid division of all national economies in which the State or the municipality monopolises certain markets and statutorily controls them—*e.g.* wheat-growing in France and Germany, and to a less extent in this country, sugar-beet in England, rail transport in Germany—and in this division the consumer practically never has any choice, for the goods or services are virtual necessities. What will be the outcome of the clash between these tendencies in the economic structure of the nations? What will be the nature of the social and economic solutions for the problem? Will the State end by taking over *all* the functions exercised by private producers up till now? If so, how will the consumers, who will be the workers for the State, be safeguarded against exploitation, wasteful uses of the factors of production, unwise decisions to produce certain things, and perhaps a lower standard of *real* income as a result?

In Search of Facts

By SIR ARNOLD WILSON

Part of a talk broadcast to Schools on September 25

ACCURATE information as to population and commerce, physical and moral conditions, and social tendencies generally, is essential to anyone who is seriously interested in public affairs. The primary source of this material is the stream of official publications issued by the Stationery Office. They cover, with a few notable exceptions, all branches of official activity, and record the main facts of national life in many directions. The annual *Guide to Official Statistics** is a model of its kind, telling you just where to look for the facts you want. Supposing, for example, that I want to know something of my own county of Hertfordshire. I pick up the 1931 Census Report. In it I find details of the occupations of men and women of every age group, town by town, district by district; how many in a house and how many in a room on the average, how many of each age-group, and the number per acre for each borough and district, with comparative figures for 1921, the previous Census.

I note, for example, that the excess of females in Hertfordshire is less than it was in 1921. There are still more women than men in the county, but not so many more. In the country as a whole, more boy babies are born than girl babies, but more boy babies die; rather more girls die than boys round about puberty, 12 to 14; by the age of 17 the numbers of the sexes have become equal. But there is a shortage of females between 20 and 30 in Hertfordshire of 4.7 per cent., compared with males of that age, that is, there are a few more marriageable men than there are marriageable women, while in Durham County there are 25 per cent. more men than women between the ages of 20 and 30. Why is there this difference, do you think? The industries of Durham are masculine industries and the younger women have found congenial employment in the Midlands and the South. What characteristics would you expect to find in the population figures of Leicester or Bournemouth? In Leicester many more women employed, in Bournemouth more old people.

These and other Census figures, which in future will be available every five years, make it possible to estimate very closely the total number of children for whom school accommodation will be needed in each successive year; that is important for Education Authorities. We can estimate the number of married couples who will require houses; that is important for municipalities who are planning housing estates, and for building speculators. What figures would you look up if you wanted to find a suitable district for setting up a toy shop? or as a bath-chair man? The Census figures also show that there is a steady migration southwards: the population of Durham County, though ten times what it was in 1801, is static or decreasing; that of Hertfordshire is rapidly increasing, as is that of all the Home Counties. That of Scotland is decreasing.

The Ministry of Agriculture's Statistical Report comes next: read in conjunction with the University of Cambridge Economic Survey, it shows that prices of farm products were lower in 1933 than in 1931—only 5 per cent. above pre-War rates, but wages were up 60 per cent. This is as clear a picture as one could have of the difficulties which agriculture has to face. No wonder farmers cannot employ as many men now as in 1914!

The same book shows that there are rather more horses in Hertfordshire than last year, and a lot more sows and young pigs. The main source of revenue to farmers is from livestock, 63 per cent.; barley, wheat, and sugar beet give them 9 per cent. each; potatoes, hay, and oats, 2 per cent. or 3 per cent. each (this excludes wheat deficiency payments). If you add that up you will find that these products account for about 97 to 98 per cent. of the farmers' revenue. Facts of this sort are of great value: they help to correct the idea that farmers are growing rich on subsidies, and I am glad to have them at my elbow.

I turn to the Ministry of Health's Annual Report—a document of extraordinary interest and variety, dealing with many sides of life. I see that only three people in all England died of smallpox in 1932, and two in 1933, and that a smaller proportion than ever of the population have been vaccinated.

I note a rapid drop of new cases and deaths from tuberculosis—especially from 'surgical tuberculosis' which is considered by some doctors to be connected with milk. The drop has exceeded all expectations, and the general death-rate from all forms of tuberculosis is the lowest ever recorded.

But there is another side to the picture. Fewer children are being born at one end of the scale: at the other end men and women, especially women, are living longer than before, long after they have ceased to work. The proportion of able-bodied men and women is consequently growing smaller, and they must each produce more than in the past in order to support the children and the old people who are not working. But, as the Census of Production suggests, mechanisation and rationalisation, on the average, have not greatly increased the productive capacity of the worker in industry in the last ten years. Does this mean that our standard of living will be reduced in the future? The increasing average age of the population, too, will result in an increase of deaths from the diseases of old age, so that increase in the figures for the typical diseases of old age must be expected: it is simply that more people will be living long enough to suffer them.

Still pursuing public health enquiries, I look up the report of the School Medical Officer for London. His main criticism is against the apathy of parents, and the repugnance of children, in spite of excellent propaganda, to the dental chair. He refers to improved feeding—of 10 year old children 93.5 per cent. were well nourished; and to a steadily rising standard of cleanliness—body vermin were found in only one case in a thousand. One must not assume that because London children are, on the whole, well-fed, the rest of England is equally well-off. In Llanelly, for instance, in Wales, the proportion of well-nourished children has fallen from 90.5 per cent. in 1931 to 76.3 per cent. in 1933. If you can imagine what these figures mean in hunger, anxiety, sickness—90.5 per cent. well-nourished in 1931 and 76.3 per cent. in 1933—you will realise that you might well spend your life in trying to alter some of the percentages in these dull statistical books.

I must pass over the Annual Reports of the Board of Education and the Ministry of Labour, and of Mines, the Miners' Welfare Board, and the Development Commissioners which lie before me, all well written and 'full of meat as an egg'. There is a vivid Report on Liberia published by the Foreign Office. There is a well balanced Report on the pros and cons of sterilisation of persons who might hand on to their children hereditary disease. The state of those parts of England where unemployment is highest is discussed in four careful volumes. If you want the facts, well marshalled and impartially set down, here they are.

One more Report, and I have done: it deals with crime in England, and it is packed with long tables.

The most striking feature is the steady decline in the figures for drunkenness, and in a less degree, in most forms of crime. Why is there less drunkenness? Why is there less crime on the whole? Almost equally striking is the fact that of 65,000 persons guilty of indictable offences, nearly a half were under 21, two-thirds were under 30. It sounds bad, but, of the 65,000 people, only one per cent. were sent to penal servitude, and only 30 per cent. to prison. What happened to the rest? They were put on probation—that is to say, they were set free, but probation officers kept in close touch with them. The commonest offence was larceny—petty theft, stealing from shops and so on—and of those found guilty of larceny three out of four were children, and the values involved in 54 per cent. of cases were under £5. One deduction is clear—more Boys' and Girls' Clubs are needed, run with the aid of young men and women of education and character.

Nearly two-fifths of all these Police Court cases were offences committed by motorists—a new class of criminal that has arisen in our midst. Thirty thousand were prosecutions for Sunday trading—which is possibly undesirable but is not savagely criminal—and 8,000 for 'gaming in public places'—which is perhaps anti-social but does not really endanger public safety.

In the study of official reports, there is a vast field open, in a very inexpensive form, to anyone who wishes to interest himself in public work of any sort or kind, and studies of this sort are indispensable to anyone who wishes to form his own conclusions as to ways and means, political and administrative. It is very easy to waste time and energy by just dipping into these reports. But if you know what you want to find out, and bring to your inquiries a clear mind and a critical eye, with pencil and paper, you will reap a rich reward.

*H. M. Stationery Office. 1s.



The Listener

All communications should be addressed to the Editor of THE LISTENER, Broadcasting House, London, W.1. The articles in THE LISTENER being mainly reprints of broadcast talks, original contributions are not invited. Articles in THE LISTENER do not necessarily represent the views of the B.B.C. Yearly Subscription rates (including postage): Home and Canada, 17s. 4d.; Overseas and Foreign, 19s. 6d. Shorter periods, pro rata.

Universal History

PROFESSOR ARNOLD TOYNBEE describes in his new *Study of History** the home of a Professor of History which he used to visit as a boy. He used to note, he says, the quiet but steady change that took place in the contents of the Professor's shelves. Year by year specialist publications, bound volumes of learned reviews, the printed apparatus of technical scholarship, claimed more and more of the space, and to make room for them the old inhabitants of the shelves, general works, literature, the poets, were relegated to the boxroom. The same thing was happening in many a professional sanctum. The nineteenth century believed so much in the methods of experimental science that it loved to apply them whenever it could, in the confident hope that striking results would follow. History had to be organised, the original sources had to be mobilised, and scholars had some grand decades among the material newly brought to light as archives were opened and proper editions and catalogues were issued.

There was much to be rewritten. The Regius Professorships at both Oxford and Cambridge had been founded under Sir Robert Walpole with the definite idea of teaching what has come to be called the Whig view of history, in the learned centres, one of which was a High Tory stronghold. There was nothing exceptional in that, for history has always been watched with particular care by the governments of men. Whether a man is writing for a few wealthy patrons, as did eighteenth-century men anxious to make their mark and earn promotion, generally in the clerical-scholastic world, or whether he is writing, as Macaulay wrote, for the general public, he must seek to please, and is not likely to please unless he shares and echoes views widely held in his time. But there is a deeper sense in which all history, in the apothegm of Croce, is present history, history which reveals as much about the time of its composition as about the time it describes. We look at the past from our own point in time, and let the past lead up to ourselves, making the judgments which belong to our age. The conventional division into ancient, mediæval and modern periods, is a seventeenth-century division which made of the Middle Ages no more than a long-drawn-out time of transition.

If most history is in effect the moralising of one age about another, universal histories, or histories of large sweep and ambition, may be expected to show with par-

ticular force the characteristics of a long sermon. From his urbane eighteenth-century chair Gibbon reproved certain kinds of violence and ignorance, and Buckle and Lecky expressed the complacencies of the next century as Bossuet had of the century before. We have witnessed of recent years a number of attempts to embrace under general formulas universal history in a much wider sense than it was known to our forefathers. Fresh civilisations have been brought to light and much that used to be dismissed as prehistory is recorded and charted. The older type of history that confined itself to Europe and its origins, and to the political fortunes of its peoples, is now framed in a wider setting, even if the attempts to apply comparative methods to the record of civilisations have for the most part been more valuable for their collections of facts and illustrations than for their main theses. It is the peculiar merit of Professor Toynbee that he has begun the publication of his own great study—it is to be in thirteen volumes, of which three have been issued this summer—with an unusually clear realisation of the limitations of the comparative method. The learned Bishop Stubbs was fond of saying that nine times out of ten historical parallels and analogies were based less on knowledge of where the subjects under discussion agreed than of ignorance of where they differed. Professor Toynbee approaches his generalisations with cautious footsteps, and his work is the more important for the modesty of its aim. Few phrases have been more misused than the phrase 'scientific history', and the adjective 'scientific' is now a rhetorical term, a way of claiming to be right. But in the stricter sense of uncommitted enquiry, world history has found a scientific historian, who has not merely come to quarry stones of convenient shape for a building already planned. Work of this kind ought to be recognised as the proper corrective to work of the Spenglerian type in which the whole world is made to render tribute to a theory as ephemeral as a nomadic tyrant. French historians have a phrase, '*la fureur de l'inédit*', to express the almost mystical value attached by competitive professional historians to unpublished material, and recondite facts from out-of-the-way and little visited fields of study may serve the same purpose of giving spurious distinction to comparative studies. In Professor Toynbee's eyes a fact is not less illuminating for belonging to the history of Europe or even of England, and he does not, for all his internationalism, tend to belittle what is familiar and near home. The study of the European past must always be the core of historical study for Europeans, and the civilisation of this small vital area stands out as a unique thing; but it can only be appreciated in its full character if there is some knowledge of the story of mankind in the other continents. World history is entering very slowly into our academic curriculum at a time when exhortations to recognise a newly achieved closeness of contact between all peoples on the globe are the commonplaces of public speech, and it is appropriate that Professor Toynbee's work, which is so important an English contribution in this field, should, for all its apparent remoteness from the international politics of the day, be issued under the auspices of the Royal Institute of International Affairs.

Week by Week

SIR DAN GODFREY'S name is chiefly familiar to the average listener today through the afternoon concerts which he and the Bournemouth Municipal Orchestra have so often given on Wednesday afternoons. Sir Dan has done invaluable work at Bournemouth, and many musicians and lovers of music, hearing the news of his retirement, will think with gratitude of the many excellent concerts he has sponsored in past days at the Winter Gardens. Nobody, least of all, we imagine, himself, is likely to claim that Sir Dan was a great conductor in the sense that Beecham and Furtwangler and Koussevitsky

* *A Study of History*. By Arnold J. Toynbee. Oxford University Press. First three volumes, 21s. each, or 52s. 6d. for the three

are great conductors. He was not. But he possessed exceptional familiarity with, if not exceptional insight into, music of any kind, and he brought to his work a thoroughness, an assiduity, above all a capacity for organisation, that were priceless assets. It is not easy to be musical director to the Corporation of an English sea-side resort; the conciliation of this or that interest, the satisfaction of hopelessly conflicting tastes, demand a combination of reasonableness and persistence that is quite exceptional. Sir Dan's activities had to range from Symphony Concerts on Thursdays to the most popular of Popular Concerts on Saturdays. In between came the ordinary concerts, two a day, partaking in varying degrees of the nature of both. Nor was this all. Not only had entertainers to be provided but, in old days at any rate, many of the orchestra had to 'double' in the military band that played on the pier in the mornings, the only time available for rehearsals. The Symphony Concerts conformed more or less to the standard type and were admirable from every point of view; and the ordinary concerts were often delightful. You never quite knew what you might hear. There were usually a march, an overture, a waltz, as like as not, and a couple of those items which, for want of a better term, are generally dubbed 'classical': two movements of a symphony, perhaps, a symphonic poem, a suite or even a concerto. Inevitably, with these concerts taking place twice a day, the repertory was vast. One heard everything of every kind, often repeated two or three times. It may indeed be doubted whether any other place in Europe offered greater opportunities for acquiring familiarity with the whole musical repertory than did Bournemouth in the heyday of Godfrey's career. Doubtless the orchestra was not quite large enough, doubtless the interpretations sometimes left something to be desired. But on the whole Sir Dan managed to maintain a laudably high standard. He was enterprising, too, for any British composer of any standing at all was able sooner or later to get a hearing at Bournemouth. In short, within the limitations of his equipment and his material, Sir Dan Godfrey achieved something very remarkable. Few men would have done half as well, and he carries with him into his retirement the admiration and the gratitude of thousands.

* * *

Considerable misgiving has arisen in educational circles at last week's announcement in the leading organ of the film trade that new regulations for amending the Cinematograph Act of 1909 have been drafted by the Home Office, with the intention of putting substandard film stock under stricter control and bringing it virtually under the same restrictions as standard film. The whole development of the educational and cultural film up to date has been built up on the use of substandard (16 mm.) film, apparatus for projecting which is of a price more or less within the range of the pockets of school teachers and authorities, adult educational organisations, social workers, and scientific and learned societies. Now the Act of 1909 exempted from the elaborate safety precautions necessary in the ordinary cinema, exhibitions where 'non-inflammable' films were used. The term 'non-inflammable' was not defined; but it has always hitherto been taken to cover so-called 'non-flam' or 'safety base' film, which, unlike celluloid film, is slow burning and not dangerous. Apparently the new regulations propose to abolish the distinction between inflammable and 'non-flam' film, and to define 'non-inflammable' as being a kind of film which will not catch fire or burn at all. Since no such kind of film at present exists, it would follow that all users of substandard film and apparatus would thenceforward have to observe the same expensive precautions as in public cinemas. But the real danger, when 'non-flam' film is used, is not fire, but the risk of panic among the audience. If the new regulations stiffen up the provisions with regard to safe exits and adequate gangways at these smaller 'non-theatrical' exhibitions, no one will complain, especially if practice is made simple and uniform in all parts of the country. But it would be a mistake, under cover of securing this desirable reform, so to restrict the use of substandard film as to cripple the present promise of a growing use of films for educational purpose. It might suit some exhibitors if the increasing competition of these 'non-theatrical' shows with the public cinemas were repressed; but this would not be in the public interest, since such competition comes from the most healthy and wholesome sources, in the shape of film societies, amateur societies, social clubs, institutes, and schools. No doubt the difficulties of adjusting

the new regulations can be overcome by timely consultation between the Home Office, the manufacturers of apparatus, the Board of Education, and the British Film Institute.

* * *

Judged by its content and arrangement, the Antique Dealers' Fair now being held at Grosvenor House is a great success. There is none of the musty atmosphere in which antiques are usually assembled, the stands are uniform enough to give a sense of order, and their contents varied enough to provide continuous interest. But judged by the professions of some of its supporters, the Fair invites criticism on other grounds. The idea has been put forward that it is 'a challenge to the "modern cult"' and an 'attempt to show that there is safety in investing one's money in the purchase of something which has persisted for a century or more rather than to take any maker's avowal that his furniture will last for the same space of time'. Now a wish to stimulate the antique trade out of the depression of recent years and to demonstrate that antiques are not necessarily expensive is one thing, and obviously a perfectly justifiable thing; but it is another to do so at the expense of contemporary work. We must first of all deplore the note of defeatism in such a pronouncement as the above, which implies that nobody today can make furniture and glass of a kind to stand comparison with that of one or two centuries ago; and second, the discouragement to the contemporary manufacturer that such an attitude would provoke. Where would Sheraton and Hepplewhite have been if contemporary buyers had insisted on this hundred-year test before making a purchase? Further, the challenge is rash because simply by reason of its period antique furniture is bound to suffer comparison with contemporary. Even while they may acknowledge perhaps the superior workmanship, or the better seasoned wood, or the greater elegance of the antique, most people are forced to buy what is best suited to the rooms they have to be put into and the lives they themselves lead; and as far more people live in twentieth-century houses than in Tudor or Georgian mansions, what will be best suited in nine cases out of ten will be the work of their own time. Moreover, we may question the expediency of pushing too far the claims of the antique in direct competition with contemporary work. At this Fair every object is guaranteed, but elsewhere it is not so: and until a person has acquired, through study, visits to museums, etc., the expert knowledge that will protect him from fakes, it is surely a better investment for him to buy for everyday use objects whose value he can at once appraise.

* * *

Our Scottish correspondent writes: All against the run of our history and our traditional inclinations, Community Drama has become a Scottish obsession. One forgets how many teams present themselves for judgment at the annual festival—the number runs into hundreds—and Scotland has more than once won the Howard de Walden Cup against all-comers in the British Isles. It is a strange symptom, and a healthy one, but there are certain signs that the movement, having progressed so rapidly and so far, is now facing with some unwillingness a decision that logically arises out of that advance. At the first conference of the kind, an open one, held in Stirling the other day, the acknowledged leaders of the Scottish Community Drama Association made it clear enough that, in their view, a National Theatre should be the ultimate aim and result of all this effort. Mr. Gordon Bottomley was explicit to that effect. He was backed from slightly different angles by that hardy professional, Andrew P. Wilson, and by no less a person than 'James Bridie', who pleaded for a central clearing-house for Scottish plays and surprisingly lashed out at the West End of London and its whimsies. Mr. Wilson's attack was on the exclusive devotion to the one-act play and on the parochial belief that a thing of the sort, competently done, is the be-all and end-all of dramatic endeavour; and it becomes extremely clear that that is precisely what a considerable section of opinion within the movement does believe. As a race we find it extremely difficult to get far beyond the wee hoose 'mang the heather, and much of the enthusiasm for Community Drama among us is rapidly being revealed as one for an amusing parlour-game. So that open conference at Stirling seems to have been a challenge engineered by those who can see round the gable of a but-and-ben to grander prospects, and it will be extremely interesting to watch how the movement, very much in danger of becoming swollen-headed over small successes, will face up to the larger issues.

Revealing the Invisible

By OLAF BLOCH

Mr. Bloch, who discusses here the new powers which science has acquired through infra-red photography, is Head of the Research Department of Messrs. Ilford, Ltd.

THREE hundred years ago Sir Isaac Newton, passing a beam of sunlight through a glass prism, showed that it was far from a simple thing and analysed it into its component colours, that coloured band, stretching from violet to red, which we call the spectrum, the outstanding example in nature being the rainbow. Then nearly 100

years ago another great Englishman, Sir William Herschel, discovered that the spectrum did not finish with red light, but that there was a kind of dark light beyond, which the eye could not see and which manifested itself to the senses chiefly in the form of heat. So that, when you hold your hand in the neighbourhood of a hot flat-iron, the warmth you feel is the result of infra-red radiation coming from the iron. Light, as you probably know, travels in the form of waves, and the infra-red waves have a great range of wavelength stretching from the comparatively short waves of red light, so deep in colour that you can hardly see them, until these waves become so long that they almost link up with the shortest waves used for radio transmission. All this light is, of course, invisible to the eye, and we must remember that there is plenty of infra-red in daylight and in nearly all forms of artificial light.

hardly expect people, landscapes, or objects in the heavens, to 'stay put' for hours on end. It was the discovery of a new dye in the Ilford Laboratories, enabling much faster infra-red emulsions to be made, which gave the recent great stimulus to this work. Nothing is simple any longer and the production of the new dye did not quite finish the story. Nearly every improvement brings subsidiary disadvantages in its train, and so a new emulsion and new conditions had to be worked out which would reap the full benefit of the new dye and at the same time minimise the defects caused by its use. The ordinary photographic emulsion is, of course, very sensitive to white light; when we add this new dye to it we do not alter it in this respect, but we confer upon it the additional property of infra-red sensitiveness.

The procedure of infra-red photography is not difficult; all that you require is a plate or film, sensitive to infra-red light, and a filter to put in front of the lens of your camera which permits infra-red light to pass freely through while stopping all other light. Since these films are very insensitive to green light, it is possible to make a lamp so that the plates and films can be handled quite comfortably in the dark room. Any ordinary developer



St. Paul's across the river, taken in foggy weather on an ordinary plate—

years ago another great Englishman, Sir William Herschel, discovered that the spectrum did not finish with red light, but that there was a kind of dark light beyond, which the eye could not see and which manifested itself to the senses chiefly in the form of heat. So that, when you hold your hand in the neighbourhood of a hot flat-iron, the warmth you feel is the result of infra-red radiation coming from the iron. Light, as you probably know, travels in the form of waves, and the infra-red waves have a great range of wavelength stretching from the comparatively short waves of red light, so deep in colour that you can hardly see them, until these waves become so long that they almost link up with the shortest waves used for radio transmission. All this light is, of course, invisible to the eye, and we must remember that there is plenty of infra-red in daylight and in nearly all forms of artificial light.

The photographic film in its ordinary state is not affected in the least by infra-red light, but it is possible to alter this state of affairs by adding certain dyes to the emulsion which is spread upon our films and plates. Infra-red photography is nothing new. Sir William Abney took infra-red photographs in 1880, but for many years the exposures required were so long that the process remained a curiosity, since you could



—and on an infra-red plate. This shows the ease of penetration by infra-red when the mist is not too thick

Photographs: Dixon Scott

can be used and, in short, when it comes to processing, you can do anything that it is legitimate to do with ordinary plates and films. The speed of these films has been so greatly increased that it is now possible, given a fine day, to obtain a fully exposed picture from the air in 1/50-second with a lens aperture of f/4.5.

Now let us talk about a few of the interesting things which

have been accomplished by this process. I have referred to the radiation given off by a hot flat-iron. You will probably think that it should be possible to photograph the iron merely by its own radiation in a perfectly dark room. This has been done, but the exposure is very long and lasts for several hours owing to the small amount of infra-red given off by the iron in the region to which the photographic film is sensitive. As I said, the infra-red waves cover a very wide range.

We measure the length of a wave by the distance from the crest of one wave to the crest of the next, and the length of

use. The penetration of fog by red light has an everyday application. Some of you own motor-cars and some of you are owned by motor-cars, and both classes of drivers often use an orange filter in their headlights in the hope of penetrating the gloom on a foggy night by a few extra yards.

You will probably have noticed in infra-red landscapes that the foliage is white, especially when the sun is shining, giving an appearance of snow in summer. The explanation of this is that the foliage reflects a great deal of infra-red light and absorbs hardly any. This takes place because the leaves would probably be injured if they absorbed too much infra-red, since when we force plants to live in red light by covering them with panes of red glass, they soon get yellow and anæmic and then wilt and die. Talking of plants reminds me that at the Potato Virus Research Station at Cambridge infra-red photographs of the leaves of potato and tobacco plants, both attacked by the virus disease, show important differences. This naturally leads us to enquire into medical applications, but before we do this we must consider another way of applying infra-red light. If, instead of putting the special filter in front of the lens and so ensuring that nothing but infra-red light gets inside the camera, we use large pieces of this filter and place them in front of powerful electric lamps, we can project invisible infra-red light and illuminate anything we please with



Infra-red (right) and ordinary photographs of an internal combustion engine. The ordinary photograph was taken in the usual manner; the infra-red in a completely darkened room, and is due to the infra-red radiation coming from the overheated portions of the engine. Crown Copyright Reserved

the infra-red waves can vary from about $1/30,000$ -in. to about $1/3$ -in. Now we are only able, by means of the dyes added to our photographic products, to make them sensitive to a short range of infra-red waves; in fact, only from those of about $1/30,000$ -in. long to those of about $1/20,000$ -in. long, so you will see that at present we are very restricted and it is difficult to foretell what developments may take place when we are able to extend the range of our photographic material.

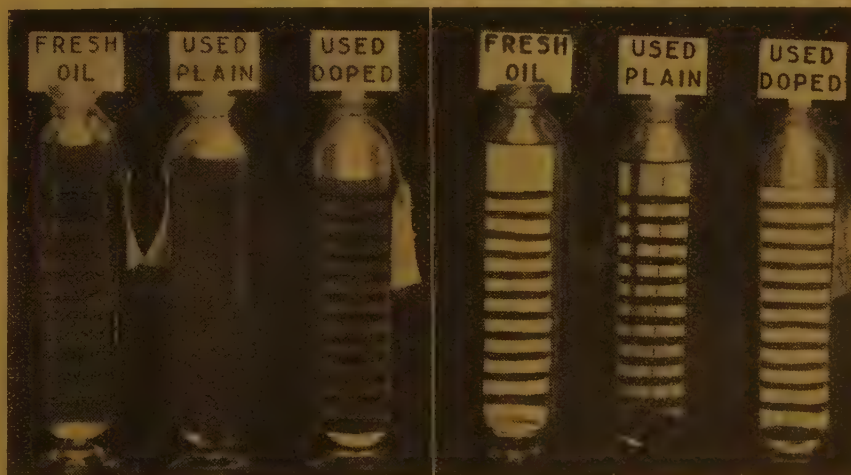
Nevertheless, some use has been found for the direct photography of heat radiation. Electric or gas radiators photographed sideways show the direction and give some idea of the magnitude of the beams of heat radiated from them. It is not difficult to obtain a photograph of an internal combustion engine (such as a motor-car engine) which is running over-heated; the exposures are, of course, made in a completely darkened room and the over-heated portions give an image just as if they were white hot, whereas, in reality, they are invisible. We are thus enabled to localise the exact confines of the trouble.

We have all been interested in the long-distance infra-red photographs which have appeared in the newspapers; showing details in the distant landscape which the eye could not see when the photographs were taken. This is due to the fact that there is always a certain amount of haze in our English atmosphere. This haze is largely due to minute particles of water, though dust can sometimes play an important part. As the water particles become larger we get mist, and when they are larger still, fog; and in speaking of fog I mean a genuine white fog. Ordinary daylight is scattered by haze and distant objects are more or less blotted out just in the same way as lamp-posts disappear into nothingness on a misty night. Now, infra-red light is not scattered by haze so much as daylight is and, therefore, if the mist is not too thick some of this infra-red light struggles through, carrying with it the image of the distant objects, and this image is recorded upon the plate or film. The longest distance covered by an infra-red photograph was taken in the United States. This was taken from the air and covers no less than 331 miles; another of these long-distance photographs actually shows the earth's curvature. These photographs often possess a charm which is all their own, but if very long-focus lenses are used, the foreshortening that results is sometimes rather alarming.

When you get a real fog infra-red appears to be of but little

it. By using a battery of such lamps it is possible to photograph the audience in a theatre, either a picture theatre or one of the legitimate kind, whilst the lights are down and the show is on. The positions and expressions of a blissfully unconscious audience can be successfully recorded by this means and the resulting photographs show everything from the sleep of boredom to the attitude of eager expectation. Thus does science add another terror to our daily lives.

To return to the medical uses. The pupil of the eye contracts in a bright light, but since infra-red light is not visible it



Infra-red photography used to detect the amount of carbon in fresh oil, used oil, and oil doped to decrease the carbonising. Crown Copyright Reserved

remains open, even when flooded with it, and thus we are able to photograph the iris when fully open, the patient being comfortably seated in the dark. In some cases of eye trouble the cornea (the horny membrane covering the eye) becomes milky and opaque. It is possible to photograph the eye beneath the misty cornea by means of infra-red and so make some acquaintance with the internal condition of the eye.

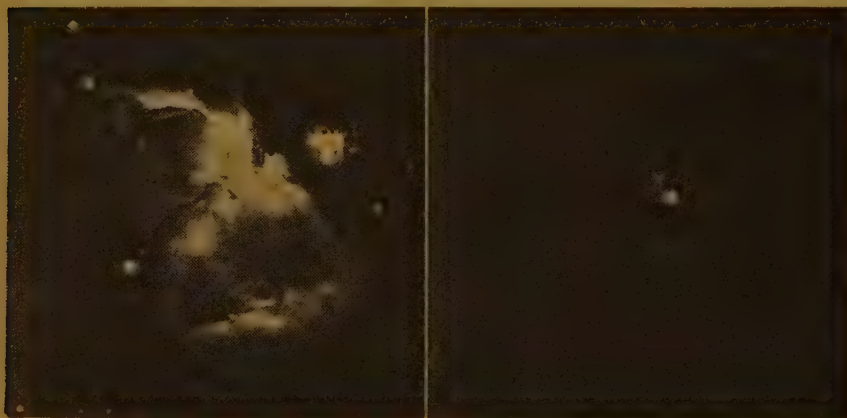
An interesting property of infra-red light is its ability to penetrate, for shorter or longer distances, substances which ordinary visible light cannot penetrate. Skin is one of these substances, and therefore we are able to see beneath the skin with the eye of the camera. This has found at least two uses. In cases of eczema the veins beneath the skin often become varicose. They are barely or not at all visible to the eye, but it is easy to get infra-red photographs of them showing their

condition. Also, in cases of that dread disease, lupus, for which ultra-violet light is the curative agent, the whole of the affected surface may be covered with scabs. Those regions of the skin which have been cured of this trouble are clean and clear beneath the scabs, and the penetration of the latter by infra-red light affords the possibility of photographing the clean areas underneath so that photographs taken at intervals reveal the progress of the cure. Here we have two interesting functions of invisible light at the two opposite ends of the spectrum, the healing ultra-violet and the revealing infra-red.

In a similar way the method can be applied to photographs taken of objects under the microscope, and very small insects which, like some people, are too dark for you to see through them, reveal the structure of their interiors almost as if an X-ray picture had been taken. It is rather a blessing that we are opaque to these rays, otherwise our children, armed with hand cameras, might amuse themselves by taking photographs of our insides before and after a meal. Such pranks are happily not within measurable distance of attainment. One common way of preparing objects for the microscope is to stain them with various dyes, and the photographs of these dyed objects sometimes give camera pictures which are very different from those made on ordinary plates. Informative results are thus obtained. When you come to think of it, not only photography, but, indeed, a very great deal of scientific work, consists in recording differences. To begin with, the ordinary photograph, whether portrait or landscape, is built up by differences of light and shade; in fact without these there would be no picture at all. The infra-red photograph is only of value when it is different from the ordinary one. As soon as we are able to record differences between objects, especially those which the eye cannot see, we are beginning to learn something.

We do not know of the ultimate reasons why dyes photograph differently in infra-red light, but we do know that if we select a number of black suiting materials and take infra-red photographs of them we find that some of them photograph light and some dark, because different dyes and different mordants have been used for the cloths. The ones which are light on the prints are those which reflect infra-red light in the same way as foliage does, and it was thought at one time that it might be possible to select a black material which, for summer wear, would be as cool as white flannel. It has not yet been found possible to do this.

Talking about dyes leads quite naturally to the question of



The great nebula in Orion

The nebulous glow is sufficient to fog a photographic plate in the ordinary way and thus prevents the photographing of the stars in the nebulous mass. Use of the infra-red plate and filter removes most of this glow and permits (as is seen in the right-hand picture) the successful photographing of these stars

By courtesy of the Lick Observatory

inks and printing. When we wish to decipher forged, over-written, faded or otherwise illegible documents we usually employ ultra-violet photography, but there are some cases in which the patient requires different treatment, and then we try infra-red. Carbon, of which lampblack is one form, absorbs infra-red so completely that if we take a photograph of any ink containing it the image upon the print is also black. Now there is a copy of Theodore de Bry's *Voyages* in the Huntington Library in America in which some offending passages were blacked out by the Censors of the Inquisition 300 years ago. These gentlemen didn't think of posterity and used an effacing ink which was transparent to infra-red light, the underlying ink being opaque and probably a carbon ink. We can photograph this today by the infra-red process and read the ob-

literated lines almost as clearly as if they had never been blacked out—surely a comment upon the futility of suppression! One other example must suffice in this sphere. In the British Museum are a number of fragments of leather, about 3,000 years old, which were used by the ancient Egyptians for writing upon; sometimes the writing was cleaned off and they were written on a second time, but the script is now so faded as to be illegible. None the less the difference in the power of absorbing infra-red light between the leather and the ink is sufficiently great to enable successful photographs to be taken, so that he who runs may read—that is if he is able to read ancient Egyptian script.

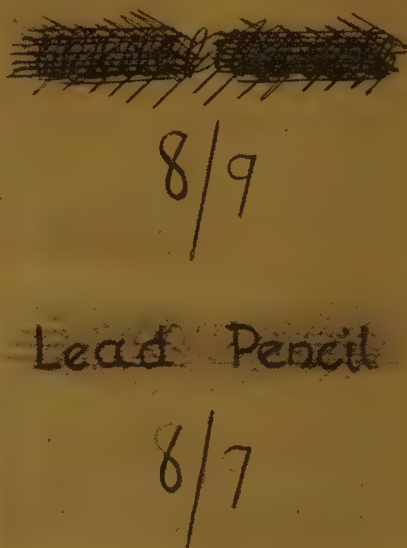
We will leave the earth for a little while and travel up into the heavens. It is possible to analyse the light coming to us from the stars and planets in much the same way as

Newton analysed sunlight, and this has added a great deal to our knowledge of the stars. The planets shine by reason of the sunlight reflected from their surfaces, and when we examine the light reflected by the planet Venus and use our infra-red appliances, we find that there is something present which does not come from the light of the sun. This something is the gas known as carbon dioxide and it must, therefore, be present in the atmosphere of Venus. On the earth, carbon dioxide is mainly produced by growing vegetation and we are left to speculate as to the cause of its existence on Venus. The nebulae form magnificent objects in the sky and photographs of them show great luminous masses with many stars distributed in the general glow. This glow gives a foggy effect upon our photographic plates, but if we employ the infra-red method we can diminish it sufficiently to obtain a clear photograph of the stars.

Let us come back to earth again. When we photographed a group of people in our laboratory by the infra-red process we noticed that some of the men revealed a considerable growth of hair on the face and looked horribly grubby, though, in fact, they were clean shaven. The hair was there right enough, because, owing to the ability of infra-red light to penetrate the skin, we were actually looking below it in the photograph. This led us to take portraits of different types of humanity.

The first Negro experimented with proved a great success and many people in many parts of the world have made his acquaintance—on paper! Not only did his skin photograph as though it were white, but his face seemed to be strangely altered, having acquired a queer Mongolian kind of appearance. We set to work and photographed some thirty different types, and though many of these were very interesting, yet they yielded little that was of interest to the experts.

Infra-red photography is an instance of how rapidly and widely any new process is tested when it emerges from the laboratory stage into a practical form, and we shall await with interest improvements in the process and the extension of its fields of utility.



Detecting obliterated writing

These examples show writing in lead pencil obliterated with writing-ink, and a price in lead pencil altered to a higher price by means of writing ink. The infra-red photograph (below) shows clearly the rightful inscription underneath the obliteration

Hford, Ltd.

To the Unemployed

By GEORGE LANSBURY

The talks for the unemployed which had such success last year are being re-started this autumn, but are now specially directed to unemployed clubs and occupational centres of which there are 2,500 in this country. Mr. Lansbury here introduces the series, and urges listeners to co-operate with speakers to make it of real value to the country as a whole

ALL my life has been spent with those who are cursed by this terrible modern scourge of unemployment which accompanies man's scientific discoveries and inventive genius into this world. I know from one brief spell of eight weeks' unemployment the demoralising effect on myself, and I know from the experiences endured by relatives and friends the devastating effect on the lives of those who are forced to endure the terrible blight of unemployment when it stretches over months and years. We are all striving after remedies; there is, however, no general agreement anywhere as to what can immediately be done to remedy this vast social evil. While we discuss and disagree about remedies, the lives of thousands of our people are being wasted and ruined. Consequently, while the nation is making up its mind as to remedies, all of us should give earnest daily thought to this most urgent problem of modern life. The churches and thousands of men and women outside the churches have united in an effort to stand in with those in distress and in every possible way to assist them to maintain self-respect and personality.

A Citizen Must Understand National Affairs

The clubs, hostels and other institutions, the gardens, allotments and sports grounds which are provided for the use and service of the unemployed are useful and should be used to the utmost extent. Life is never so hopeless when our doubts and difficulties may be shared with others who are in similar conditions to ourselves. There is, however, something more to be done which is of quite as much importance. We must use every ounce of our mental energies never to allow ourselves to settle down and become contented with a life lived outside the industrial and social life of the mass of our fellow-citizens. It is true that when unemployed we are mainly helpless victims of conditions beyond our control, but we are also citizens, part of the great democracy to whom has been entrusted the great task of administering and governing this country, and helping to find a way out of our social and economic difficulties. Therefore, whether we are employed or unemployed, rich or poor, it is our bounden duty to try and understand all that concerns the well-being of the whole nation.

I hope, therefore, you will all be good listeners; and that at the end of each talk you will settle down to long, friendly, and useful discussion between yourselves. You must, as St. Paul advises, prove all things and hold fast to that which is true. All of us are too much inclined to allow others to think and speak for us. These talks are for you, not only as listeners but also as thinkers and talkers between yourselves. We want you to use and develop the brain power which God has given to you. You are to be seekers after truth, and when you find truth follow wherever it may lead. Remember the words, 'the truth shall make you free'. This is as true about unemployment and all our social problems as it is about any other question. So come to the talks as good listeners and thinkers; bring with you paper and pencil so that you can scribble down points of interest or disagreement. You will be able to write both to the speakers and to the B.B.C. if you desire further information as to the subject matter of the talks.

Talks on Trade and Employment

The talks will be on Mondays, Tuesdays and Fridays during this autumn and winter: on Monday and Tuesday at 11.0 and on Friday at 3.15. All the speakers will speak for twenty minutes. The first three talks on Monday, beginning next week, will deal with present conditions of trade and employment in Germany, France and the United States of America, and will also tell us what the Governments of these three nations are doing for their unemployed. After these you will discuss how conditions in all parts of the world affect our trade, and how interdependent the most remote parts of the world are upon each other. Then will follow a talk dealing with international trade and finance; next will come a dis-

cussion on money, when you will be told what is the meaning of the 'bank rate'. You will also hear how cheap or dear money affects industry and trade. The last three of these Monday talks will, I think, be the most vital and interesting of all. The first speaker will talk to you about the history of mechanisation, which in effect is the story of how machinery has replaced man in the task of supplying our daily needs. Then a speaker is coming to tell us what is to be the future of this mechanisation business and where it is going to end. The last of the series will be a discussion between an employer who has introduced labour-saving machinery into his factory and an unemployed workman.

Clubs and Leisure Interests

On Tuesday mornings you will hear talks on equally important but simpler questions. Our leisure time, whether we are in or out of work, is of importance to us. For one thing, it is our very own and all of us should be jealous how we use it. I am an out-and-out supporter of every kind of healthy sport. To strive to emulate each other in games which call for skill and endurance is good for us and helps to keep our bodies strong and healthy. These Tuesday talks will tell you about sport, games, and club life generally. Some club leaders will, I hope, be allowed to come to the microphone and tell you how their club is going. You will also hear about gardening and allotments and other work being carried on by unemployed men for the benefit of their wives, children and other dependents. Do not imagine that any of us think these schemes for sport and decent use of your time can make up to you what you must in every way lose by unemployment. All we hope from them is that they may help you preserve your body, soul and spirit in something like a good healthy condition. And let us hear quite a lot from you club men; how the clubs can be increased and improved, and in what way the B.B.C. can be of assistance. There are other subjects which will be discussed on Tuesdays. Parliament will soon meet again, and legislation may be introduced which will affect the lives of unemployed people and their dependents. Such proposed legislation will also form the subject of talks and discussion during this series.

On Friday afternoons at 3.15, you will hear the same speaker each week—Mr. John Hilton, who is already well known to all listeners. During these nine weeks he will tell you what he thinks about happenings at home and abroad—a weekly commentary on life in general which will enable you to discuss current events a little better than by reading the newspapers.

Importance of Discussion

These then briefly are the talks which I wish you to take part in. You will have noticed that each speaker who introduces a subject will speak for twenty minutes, thus leaving you plenty of time to discuss what you have heard and your own thoughts and opinions. I should like to hear that each club has chosen its best and clearest thinker as Chairman, and given him power to try to keep each speaker's thoughts on clear straight lines, otherwise you will mix up your thoughts with a muddled kind of argument which raises irrelevant questions and thus prevents your reaching final conclusions. Properly discussed, these talks should give you all much knowledge and understanding and broaden your minds, and will, I hope, make you understand that all that is wrong is in ourselves. We have yet to learn how to live. All of us, no matter what our position or condition in life, may determine that we ourselves will live up to the full stature of true citizenship, that we will be worthy descendants of those who so well and truly laid the foundations on which our municipal and Parliamentary life has been built. Sometimes it may appear to you that all this machinery has failed. This is all wrong. The evil which curses present-day democracy is our failure to think for ourselves, and act as citizens responsible to each other. There is lots of talking but very little original thinking. It is so easy to allow others to do our thinking for us.



The Laocöon, by El Greco—which is at present, and throughout this month, hanging in the National Gallery, on loan from Prince Paul of Yugoslavia

What I Like in Art—XV

The Laocöon of El Greco

By PAUL NASH

SOME months ago when the Editor of *THE LISTENER* first invited me to contribute to the series of articles on 'What I Like in Art', my first thought was to find out who else was expected to write, and what works of art had already been chosen. My enquiries produced rather curious information. It seemed that a great variety of contributors had been called upon, but although they included many of the keenest authorities on Modern Art, not one had promised enthusiasm for anything later than the nineteenth century. The exposure of such an attitude in the pages of *THE LISTENER* struck me as something of an anomaly. One might argue that it was inconsistent with many recent passionate avowals in support of contemporary masters, to find, when it came to the point, no one inclined to prefer them to the classics. But the explanation soon appeared. The only condition placed upon choice was that the subject must be easily accessible to the public. If you will take the trouble to comb our London Galleries, you may come to the same surprising conclusion as I did, that they contain no considerable work of art more recent than certain specimens of Post-Impressionism. That is to say, the whole development since the inception of Cubism, the entire range of abstract painting and sculpture, and the later manifestations known as Surrealism—in short, what we have come to know as 'Modern Art'—has no place.

It was during my vain search for a modern picture in the modern section of the Tate Gallery, that I happened to learn

that a painting which had a peculiar interest for me was now on loan at Trafalgar Square. This was El Greco's 'Laocöon', which I had last seen on the walls of a private house in Regent's Park, shortly before I went abroad. In the meantime it had passed into the hands of Prince Paul of Yugoslavia, who had lent it to the National Gallery. It rests there for a short while only, completing a magnificent group in company with 'The Money-Changers' and 'The Agony in the Garden'. It is most lamentable that it should ever leave such an appropriate place.

My first view of this great painting of El Greco's was disconcerting enough. It appeared as a background to my hostess—a beautiful stranger—as she rose to welcome me and present me to her other guests. I remember being able to shake hands, but felt it must be obvious I was not absorbed by the encounter; but was forever staring beyond, as if startled by some apparition, invisible to others in the room. This, I believe, was near the truth, for none of them was experiencing the shock of seeing the 'Laocöon' for the first time. I visited the house once more, when I was able to study the picture at greater length; my third meeting took place in the National Gallery a few weeks ago.

I have chosen to write about this painting for several reasons. Certainly it is 'What I Like in Art', but it is selected because, of all pictures within range, it seems to come nearest to those examples of abstract pictorial drama which I had in mind to discuss. Of all old masters, El Greco is the most

difficult for the orthodox man to explain and justify, because, if he can explain and justify El Greco, he finds himself explaining and justifying practically the whole of the hated modern movement. In El Greco can be found all those unjustifiable and inexplicable things: abstraction, distortion, arbitrary colouring, over-emphatic design, fantasy, unreality, disrespect for nature—in short, an academician's nightmare. To the conventional and ignorant his work seems an aberration. As I sat before the 'Laocoon' a consequential young man and a rather bewildered young woman intervened. The following conversation is faithfully reported: YOUNG WOMAN: 'What's That?' YOUNG MAN: 'It's by El Greco. He was a madman'. YOUNG WOMAN: 'But would he be here—in the National Gallery?' YOUNG MAN: 'Oh, yes. There's another over on the other side, Cizzan, or something—a "Modern". All these "moderns" are mad; I read it in the *Morning Post* . . .'. It will not do to ignore altogether such pronouncements. They are, at least, the frank expression of a reaction, in part, of the public mind. But it may be interesting to examine what it is about the work of El Greco which to many laymen seems merely crazy, yet to me, a painter, forms the subject of such moving beauty.

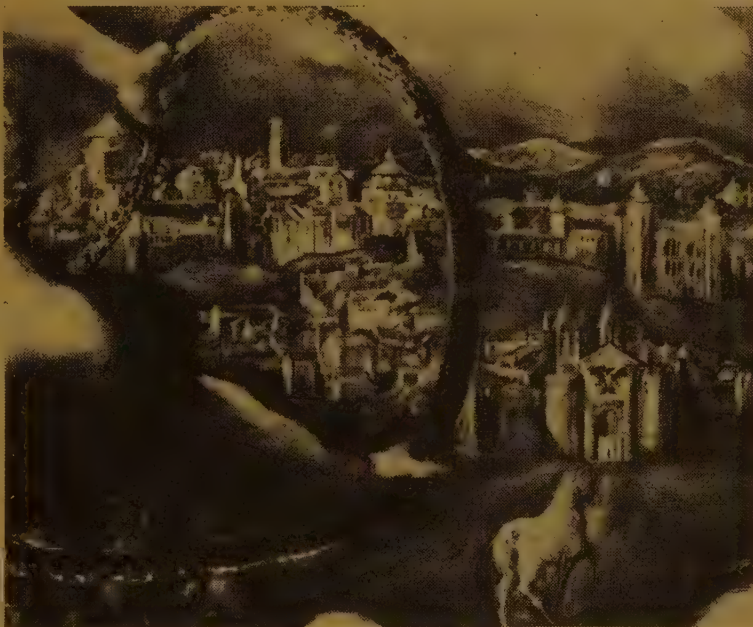
In the first place, El Greco may be said to be, primarily, a designer. When he sets out to illustrate a theme, the subject-drama, whatever it may be—'The Agony in the Garden' or the torture of the Laocoon—is not left to appeal by virtue of its own descriptive message. It is infused and animated by an extraordinary force pursuing no seemingly reasonable explanatory course to convey its story but rather

seeking to brand the imagination with a series of indestructible images, the true significance of which lies in their *formal* symbolism. This method tends to change the nature of pictorial appeal, so that the unsophisticated or uneducated spectator, instead of asking himself, 'What is this *about*?' is inclined to exclaim, 'What *is* this?' The natural curiosity in subject is overcome by a startled interest in *object*. In fact, the immediate appeal of such pictures is that of, virtually, abstract values in form and colour alone. Such an appeal is decidedly unsettling to normal untrained or mistrained powers of appreciation; the simple conception, that every picture tells a story, is suddenly supplanted by the altogether difficult idea that every picture plays a symphony. Now this is just the point of difference between what I believe most people like in art and what I like. They like a picture to tell a story; I like it to play a tune. I look at a picture or a sculpture as I listen to music, therefore it is the abstract values, the significance of form and colour and movement, as it were in their own right, which I seek to find. Let me attempt to convey my meaning by reference to the Laocoon.

In the first place, you will notice the strange nature of its projection. It is not planned in a normally convincing way. The three principal elements of sky, earth and human forms are curiously fused. The closer you look, the less sure you become as to the actual stability of anything. We find the logic of gravitation deserted for more logical considerations in the mechanics of design. The composition is nowhere reasonable, but seems to hang in the air like a mirage. Then, a con-

vincing illustration of Greco's arbitrary treatment of facts is seen on the left of the picture, where a figure wrestling with a serpent abruptly arrests the progress of the painted landscape which does not continue beyond his body! On the other hand he bends his snake into an arched frame for the mounting structure of the distant town. Here, no better instance of a kind of pictorial virtue of necessity could be found. The action is quite natural in the circumstances, being powerfully descriptive of a frenzied effort to ward off the poisonous throat, to twist and break the reptile's back. Yet who but El Greco would make of this such thrilling drama of form and movement! It is the same throughout this great composition, and it would be profitable to make an exhaustive analysis of its character could this slight essay be extended to any length. Unfortunately it is possible to give no more than a few hints by way of a guide to further appreciation of the 'Laocoon'. Contemplate, therefore, the strange beauty of this masterpiece; its haunting mood, the cool temperature of its lunar colours, ochreish whites, olives and cold greenish blues, the tart

contrast of red flavours in the rocks and background. Discover the subtle beauty of the pervasive, slightly warm yellow, the sharper notes of yellow and of white which echo at intervals, the cavernous deeps of dark luminous brown. See how these racked bodies seem almost to levitate in their struggle with the pug-faced snakes; or are tossed as upon waves. Note the extraordinary contrast of violent action and detached calm—the threshing arms and legs against the plodding distant horse: the torrential rocks and agitated sky, the quiet, cold, inexplicable figures which



Detail from the Laocoon

seem to revolve like sculptures on pedestals of air. All these are part of a reasoned and ordered scheme; but it is the outcome of an effort not simply to describe an imagined scene, but to create, by means of formal symbols, a compelling drama of abstract beauty.

September Fires

Haulms burn
in distant fields:
reluctantly the plumes of smoke
rise against the haze
of hills blue and clear
but featureless.

Our feet
crush the crinkled beech-leaves.
There is no other life than ours.
God is good to us this September evening
to give us a sun
and a world burning its dross.

Let us burn the twisted years
that have brought us to this meeting.
The crops are culled—
we can expect no other fruit
until another year
brings fire and fealty and the earth in barren stillness.

HERBERT READ

Malnutrition—the Frustration of Science

By LESLIE J. HARRIS

Dr. Harris, who is Director of the Nutritional Laboratory at Cambridge, discusses the need for education and planning in nutrition

HOW far ought a scientist to interest himself in politics? This was the question which recently formed the subject of a sparkling controversy in the pages of the weekly scientific journal, *Nature*.

It happened that Professor A. V. Hill, one of the most eminent of English scientists, a Nobel laureate and one of our leading physiologists, had given an eloquent address, in the course of which he protested against the persecution of German scientists for their opinions or their race. Now Professor Hill came to this conclusion: he said that 'if scientific people are to be accorded the privileges of immunity and tolerance by civilised societies they must observe the rules'. In other words, he said, it was 'up to' scientists not to meddle with morals or politics. They must remain 'aloof and detached'. Otherwise, he concluded, they forfeited their right to tolerance.

Should Scientists 'Meddle'?

Now many, if not most, scientists do in fact obey Professor Hill's rule. But there are others who seem to consider it their right, or even their duty, to 'meddle', and are quite unrepentant about it. Of these latter, one of the most able and informed and witty is Professor J. B. S. Haldane. Haldane wrote a reply to Professor Hill, which was published in *Nature*. In the course of this reply he put the following questions to him. He asked: 'Does Professor Hill condemn scientific men who investigate human heredity because their results discredit the theory of the equality of man?' And, 'Does he condemn those who investigate human diet because they demonstrate that a considerable section of the British working classes is underfed?' And so on. And, said Haldane, if Professor Hill condemns, as he does, the irrational character of modern political movements, surely the remedy is that more scientific thought needs to be applied to these political and moral problems and not less. And Haldane has one final point: if we refuse to apply our scientific method to human affairs, he says, are we not thereby but hastening the general collapse of our whole political and economic system—and where then would stand the 'security' and 'immunity' of science and the scientist? So much, then, for the arguments which can be put for and against scientists taking part in political discussions.

Now as it happens, my own job in science has to do with research in nutrition, and that necessarily brings me also close up against many problems and many facts which have their economic or social, or even political bearing. But I do not propose myself to discuss economics or politics here (in fact my official position precludes my doing so). What I want to do rather is to draw your attention simply to the cold scientific facts and then any of you who are interested in their social or economic or political applications can, if you wish, draw your own varied conclusions. These facts themselves which I have to relate are not in dispute. Many of them are distressing and alarming; and they do not generally receive the publicity they deserve. Certainly they raise many questions having political or economic implications and no one can dispute that they call out for the urgent attention of the statesman.

Preventible But Not Prevented

In brief, what I have to tell you is a record of a very considerable amount of unnecessary and preventible deprivation and suffering. I am thinking largely of those conditions of malnutrition for which modern medical science knows the remedy—remedies of which there is no inherent shortage in nature, but of which man is, nevertheless, still kept deprived, solely because of the stupidity or ignorance of a society which fails to make proper use of its resources, or fails to apply its knowledge.

To make myself clearer I will start by giving you one concrete instance of the kind of thing I mean. In the United States of America a good deal of attention has been given by research workers to a disease whose very name is unfamiliar to most in this country—pellagra. Its cause is an impoverished diet. The means of preventing it, by making good the dietary deficiency, have been known for some years—ever since it was first pointed

ed out that patients in asylums and poor law institutions in the Southern States suffered from the disease while their doctors and nurses remained free because the latter were given a more proper diet. Yet the official returns from Washington show that the number of certificates for deaths from pellagra entered there in the course of one year recently (1930) was no less than 7,146. (This is the death-roll as officially known; the actual number of deaths is said to be considerably higher, even.) That is, 7,146 deaths recorded in a year from a preventible disease, known definitely and beyond dispute to be due to underfeeding and at a time when food is being burned and thrown into the sea! This seems lunacy indeed, and one can understand the despairing medical scientist at long last venturing to suggest that perhaps, after all, scientific principles might be given at least a trial in the sociological field, so that his discoveries need not be so much sheer waste.

I could say a great deal more about appalling conditions of malnutrition abroad in other places where they are far, far worse than in America—as in India, in China, and so on—but naturally you are primarily interested in conditions at home, and so I can only allude to them very hastily, in passing, before returning home for our main consideration.

Room for Scientific 'Planning' in India

But here are one or two fleeting glances from overseas which will help to convey to our minds some impression of the immense amount of suffering throughout the world still caused by bad feeding. Let us begin with India. In India permanent and total blindness is very common, and it is an accepted fact that its chief cause is Vitamin A-starvation (xerophthalmia). In certain regions in the South of India, where the staple diet consists of milled rice, nearly all women suffer from the disease called beri-beri (that is, Vitamin B₁ deprivation) and there the number of premature births is three times greater than it is in the North of India (where a more adequate diet is customary), and the death-rate of young infants is many times greater. Again in certain congested city areas in India, such as Lahore, every other child has the so-called 'juvenile rickets', a condition very rare indeed here in England. In Egypt 62 per cent. of the Fellahin, or small farmer class, are said to have pellagra, despite all the scientific work that has been done on the question! In parts of China the distressing disease of osteomalacia (or adult rickets) with the softening and crippling distorting of the bones to which it gives rise is almost universal among mothers. In the Far East no one can say how many thousands of deaths still occur every year from the preventible disease, beri-beri.

But now let us return to our own country and learn what science has to teach the statesman here. Malnutrition, as we see, may be due to two causes. Firstly, people may have insufficient money to spend on food. Secondly, given enough money, they may have insufficient knowledge to buy the right food. That all-important economic factor—that is, having enough money—I will return to later. First, then, let us discuss the other aspect, the question of knowing what to buy.

Now, many people will tell you that this idea of educating people to buy the right food is all nonsense. They ask 'After all, how did our ancestors manage to get on before this new-fangled idea of vitamins had been heard of?' 'Can't you rely on instinct', they say, 'to tell you which food to eat?'

The reply, to be quite blunt, is that our ancestors did not get on 'so well' at all; they got on very badly. The 'good old days' were really the bad old days.

Progress to Date

Let me give a few records of progress to prove this. We have progressed since a couple of generations back when severe rickets was so prevalent in many of our industrial areas, with its toll of distorted limbs, bow-legs and knock-knees and often crippling for life. We have progressed in halving the infant death rate during the first twenty years of the present century (in the eighteenth century three babies out of four in London died before they were five years old!);

and we have progressed in reducing many another 'mortality' and 'morbidity' rate too. We have progressed in the continued gradual improvement of the physique of the rising generation—for example, in 1927 the elementary school boy of leaving age (at Liverpool) was an inch taller and weighed 4 lbs. heavier than only six years earlier. We have progressed since those earlier days when it was still unknown how to prevent the dreadful plague of scurvy then so prevalent on board ship—or, for that matter, even on dry land in northern climates during the winter months. Admitting that other factors, such as improved hygiene, may also have played a part, there can be no doubt that these advances are due to a very considerable degree, or in some cases entirely, to better feeding.

I cite this record of past progress not so that we may imagine that all is now well and nothing more remains to be done, but on the contrary, to show how much is possible, and give us encouragement for still further efforts as we realise how much still remains to be done.

Instinct or Experience?

One other fact we can learn from these records of past progress. That is, that 'instinct' is not always in itself sufficient guide to correct nutrition. It must be aided by knowledge and by experience. For example, it is a recognised fact that a majority of babies in this country will develop some degree of rickets unless they are given cod-liver oil (or vitamin D), and we cannot pretend that the babies (or their mothers) have a natural instinct to tell them to demand cod-liver oil. Take another example. In many regions of the world, *e.g.*, in Switzerland, in parts of America, and elsewhere, the soil, and hence the food also, is deficient in iodine, and this has been the cause of much disease and suffering, in the form of a malady called goitre. The governments have come to the rescue by adding iodine to the drinking water, to the salt, or to chocolates fed to school-children, and with the most striking effect. Would it not be idle to maintain that any reliance on instinct could have set right *this* dietary deficiency? Many other instances of the failure of 'instinct' could be given. For example, the disease called beri-beri (due to Vitamin B₁ starvation) has been very common in Japan—at one time no less than 40 per cent. of seamen in the Japanese Navy suffered from it: now instinct did not tell them that they could prevent it by eating whole rice instead of milled rice. That was found by experiment, and experience. It had to be and still has to be taught. Similarly with scurvy, in our own country. Captain Cook knew this, and he has an entertaining passage in one of his books describing the great difficulty he had in persuading his sailors to eat the very fruit juice or cabbage which would keep them free from scurvy*.

But, you may argue, all that is needed to insure correct nutrition is to return to primitive conditions of life and feeding. That is not true either. On the contrary, it is a fact that malnutrition of the most devastating types is often seen among primitive peoples and native races, who are often the victims of faulty dietary habits. For example, very often it is found that a tribe in a particular district suffers from poor physique, physical infirmity and abject misery which can be attributed entirely to the fact of unsuitable food habits inherited generation by generation from their ancestors; while a neighbouring tribe living on a different type of dietary may enjoy good health and fine stamina.

Animals are sometimes able to choose food by what we call 'instinct', but what really often turns out on closer examination to be not instinct at all but experience! That is, they find out what does them good and then come back for it next time, just in the same way as I sometimes take a glass of beer, not because I have any inherited instinct for its flavour but because I recollect that I felt 'better' after it last time. Just in the same way, do we learn to take hot food when we are cold, drink when we are thirsty, or a stimulating cup of tea or coffee when we are tired—we appreciate, sub-consciously perhaps, that it did us good last time.

The Position Today

Be that as it may, the real lesson for us at the moment is this, that if our natural instincts or appetites are not always an infallible guide to the right food, science now has been able to find out for us how to prevent these various conditions of

malnutrition which have been so prevalent in the past. We have progressed much, since many of the worst ailments of the past are now no longer seen. And again we have learnt much, since many ills still with us we know at least how could be prevented. The leading question for us today therefore becomes this: Do we actually make full use of the knowledge we have won, and can we say (now that there is more potential wealth in the world than ever before) that no one now is left to go hungry? Unhappily it is impossible to give a whole-hearted affirmative to either of these questions. The reason, as I have already said, is twofold. First, sometimes because practice does not keep pace with existing knowledge; second (and perhaps a more fundamental obstacle) because social maladjustment allows larders to remain empty while storehouses are full.

The Educational Factor

As example of practice being behind knowledge we may allude to the fact that mild rickets is still not uncommon (*e.g.*, according to the official statistics of the Ministry of Health in 1930, 87 per cent. of five-year old school children in London still showed some degree of rickets. Or again many babies and mothers (principally among the working classes) still suffer from nutritional anæmia (for example, 75 per cent. of the artificially fed babies, or 42 per cent. of the breast fed, in the London slums, according to a recent survey; or 50 per cent. of the mothers in a working-class area in Aberdeen). Both these troubles can now be readily prevented. The remedy here is largely education. In this direction, the United States of America has a good deal to teach us. There it has been found worth while to institute a new profession, that of the nutritionist. The object of the nutritionist is to advise the householder about the outlay of her budget as well as to advise the local health authorities about the prevalence of any diseases of malnutrition in their areas. The nutritionists are now recognised to be of such importance that a White House Conference was recently called devoted entirely to their work.

At the present time—and there is no use disguising the fact—the principal difficulty is the economic one. Surveys have recently been carried out by Medical Officers of Health, by sociologists, by university research groups, and others—at such centres as Sunderland, Southampton, Merseyside, and Poplar and elsewhere—which have revealed the distressing fact that a large proportion of families is unable to afford for their food even that bare minimum of money which is recognised by the B.M.A. Committee (and by other authorities) to be necessary if full health is to be maintained. The most serious aspect of this evil is when growing children are forced to go short; for the damage done may well be irreparable. Now, investigations have been carried out, first in this country, and since confirmed all over the world, which have proved beyond shadow of doubt that the addition of a pint of milk a day to the diet of a growing child results in the most striking improvement in his physique, in his health and in his good spirits. When, as today, so many thousands of children are still deprived of the daily pint of milk which science has proved they need for optimum health, we cannot pretend there is no undernourishment in this country today.

The Future

Fortunately, I think one can see some grounds for hope in the more widespread attention now being focussed on this issue of malnutrition. It is greatly to be desired that the standards of minimum diet which have been set up by the B.M.A. and the other experts should now be recognised by public authorities, so that relief may in fact be 'according to needs'. As we dwell on existing differences between well-to-do people and the 'industrial classes' in their physique, in their death rates and in their standards of health (morbidity rates) we realise how much still remains to be done.

When science knows the remedies for such ills, and the remedies although available are left to waste, science may truly be said to be frustrated. If science has been able to achieve so much, discovering how to alleviate human suffering, increasing the production of the earth tenfold—can we believe it to be beyond its power so to organise and plan our society that its overflowing wealth and potentialities are made available for man's use?

* The men at first would not eat it, until I put it in practice—a method I never once knew to fail with seamen . . . for such are the tempers and dispositions of seamen in general that whatever you give them out of the common way, although it may be ever so much for their good it will not go down and you will hear nothing but murmurings against the man that first invented it, but the moment they see their superiors set a value upon it, it becomes the finest stuff in the world and the inventor an honest fellow. . . .

Microphone Miscellany

Value of Group Discussion

THERE WAS A TIME when all the books in the world worth reading could have been housed in a small room. Cynical people may suggest that that is still true! But, seriously, the growth of knowledge has destroyed something which was very precious—for want of a better word let me call it the *unity of civilisation*. When knowledge was simpler there were certain things which every educated man and woman, in Europe at all events, was expected to know. That is hardly true today. A man may be a famous classical scholar, and know nothing, shall we say, about biology; or he may be a brilliant mathematician and know no history. Knowledge has been parcelled out. I suppose that it is the philosopher's job to bring all these fragments together, and to make them into an orderly pattern—a picture of the universe which will convince our intellects and win our hearts. But it is difficult going, even for philosophers. It is not surprising if the ordinary man gives the problem up, or starts guessing! Yet he, too, has something to give. Not everyone would agree with me; but, for my part, the knowledge of the world I want is the kind of knowledge which will serve the ends of living. I don't mean that it must be *practical* in any narrow sense; but that it will help me to understand in order that I may *do*. Most of all, I want the knowledge which will make it possible to get the world out of the terrible mess in which it seems to be drifting at present. That is where the ordinary man and woman come in. They can bring much of this new knowledge to the test of practical experience: does it fit in with what they know of life? Not merely 'Does it work?', but 'Does it explain things?' 'Does it connect up the different bits of their own experience in a way that satisfies them?' You know the old Greek legend of the God who, when he lost his vitality, could get it back by touching his mother Earth. I don't know what the psychologists would say to that! But

I do know that whenever in the history of the world knowledge and culture have grown remote from the common experience of ordinary people, they have begun to wither at their roots.

One of the reasons why I believe in broadcasting is because it brings the expert and the ordinary listener together in a new way. It makes the expert try to express himself in language which the ordinary man can understand; and that is very good for the expert—and by no means easy. On the other hand, I don't think it does any of us harm to stretch our minds now and again, and to make an effort to discover how the world looks to these experts, what they are trying to do, and how they are setting about it. And I really don't believe that, in the long run, they can do much without our co-operation.

Unless you have tried it you cannot realise how different it is to listen in a group, with a discussion to follow. Of course, a good deal depends on the group-leader. But leading a group is much easier than it sounds: you needn't be an expert or even a highbrow—certainly not a highbrow! If you get the right mixture in your members, the group will almost run itself—a

good deal of the skill in leading lies in getting a good group together. You want people with different kinds of experience and different views, but without bees in their bonnets. And you needn't agree—even Royal Commissions generally have minority reports. Apart from anything else, it is a very amusing way of spending an evening.

PROFESSOR J. H. NICHOLSON

'Establishment' or Freedom?

Part of a talk on Thomas Chalmers, in the series 'Stalwarts of the Scottish Church'

IT WOULD BE a profound mistake to conceive of Chalmers the Churchman as a mere 'ecclesiastic'. Church courts and the business commonly transacted there had little interest for him. Nor was there anything clerical, much less sacerdotal, about his conception of the Church itself and its functioning in the world. For him the Church was Christ's living Body, there to build up His Kingdom and, especially, to declare His Word to men; and for the branch of the Church he personally served, his dearest wish was that it should be able effectively to minister the Gospel to every class and in every corner of the land, as well as beyond the seas. Probably his happiest years were those late 'thirties when, under his inspiring leadership and with the help, as he put it, of dukes and ditchers, the expansion of the Church in Scotland went forward, amid all the grim complexities occasioned by the Industrial Revolution, in a manner truly wonderful. And then the clouds darkened, and the conflict broke out amid whose warring elements the rest of his days were to be spent.

The embers of the controversy are even yet not cold: is it possible to touch on what was at stake without re-kindling them? It ought to be so. A few years since, it will be remembered, on the morrow of the rejection of the Revised Prayer-

Gresford Colliery Fund

THE WHOLE NATION is appalled by the disaster from explosion and fire which has overwhelmed the mining community associated with the Gresford Colliery. Two hundred and sixty-four men have lost their lives in tragic and terrible circumstances—the worst mine disaster for twenty years. The Mansion House holds no shutters of silence when assistance and help are needed. The heartfelt sympathy of the whole country goes out to over 800 wives and children, their fathers and mothers and all those who loved them and are left to mourn. Hundreds and hundreds are thrown out of employment, while the population of over seven thousand will constitute a distressed area facing the months of winter.

It is on behalf of this community smitten with this sudden blight that I appeal to you. On behalf of the Lord Mayor of London I have opened a Mansion House Fund, and have received a magnificent lead from H.M. the King, the Queen, and all the members of the Royal Family—a sympathy that one ever associates with the Royal House. How shall we follow that lead? We have read of the indomitable bravery of scores of miners and rescue workers in the face of appalling danger. Their noble work continued to the very last point of endurance and to the brink of further disaster, so long as any chance remained of saving the lives of their fellow-workers. This is the true English type of courage and calmness. Always steadfast in moments of great shock or calamity; indeed dependable. The conduct of these men in face of disaster is an English epic. I know the whole country desires to help, and I claim with confidence an attention I have no power to command beyond that power of Charity which is ever lurking in the Englishman's home, in the house of every true Britisher. Do send your gifts to the Mansion House, London. Will you stretch out a hand—the hand of sympathy and understanding, that understanding which can weld a world, that shall do something to soothe the great sorrow?

—From the Appeal broadcast by Alderman Sir Louis Newton on September 26.

book by the House of Commons, the Church of England authorities plainly intimated to all concerned that State privileges, however valuable, might be bought too dear, and they concluded thus: 'The Bishops fully recognise that there are circumstances in which it would be their duty to take action in accordance with the Church's inherent authority. We recognise this duty and are ready, if need be, to fulfil it'. But for the Church in Scotland the hour had struck a century before. It is impossible to enter into detail here, the main issue alone can be indicated. The autonomy of the Church of Christ as such no one in either case thought of questioning. The problem is—suppose the Church, in any part of Christendom, taken up into a special State-relation, what then? 'Establishment' and unfettered freedom, in short, are they compatible? In Scotland it was urged that they were, that the long series of statutes embodying the State-connection secured the Church in its liberty, but in vain. The law courts, lower and higher, decided otherwise; and when—this particularly is to be noted—Ministers of the Crown and Parliament were besought to rectify the situation, this, it ap-

peared, was not feasible. Neither Whig nor Tory would agree. 'Establishment' or freedom—either the Church might have, but not both. To ask for both was to ask for what, in the words of the Prime Minister of the day, 'never could be realised in any country in which law or equity or order or commonsense prevailed'. As a branch of the Church Catholic the Church of Scotland no doubt was possessed of an inherent spiritual liberty; as the National Church of the land she had come under contract with the State and must abide by the terms of it, was the 'creature' of the State and, of necessity, subject to it; making the 'disruption' of the tie between the two inevitable. High Churchmen at least had no choice! Christ's Church was not free to barter away its freedom or any portion thereof or to dilute its obedience to Him alone. Hence, after ten weary years of controversy marked by many a humiliating episode throughout the land, and when every expedient to avoid it failed, the exodus into the wilderness of Chalmers—Chalmers, the Tory defender of Church Establishment!—and a full third of the Scottish clergy, a gesture of sacrifice for conscience sake which must be allowed to rank among the finest in modern history. It drew forth the sympathy of the world. And yet the courage of those who, with heavy heart, remained behind to repair the wreckage and to wait for better days, must be pronounced to be only, if at all, less admirable.

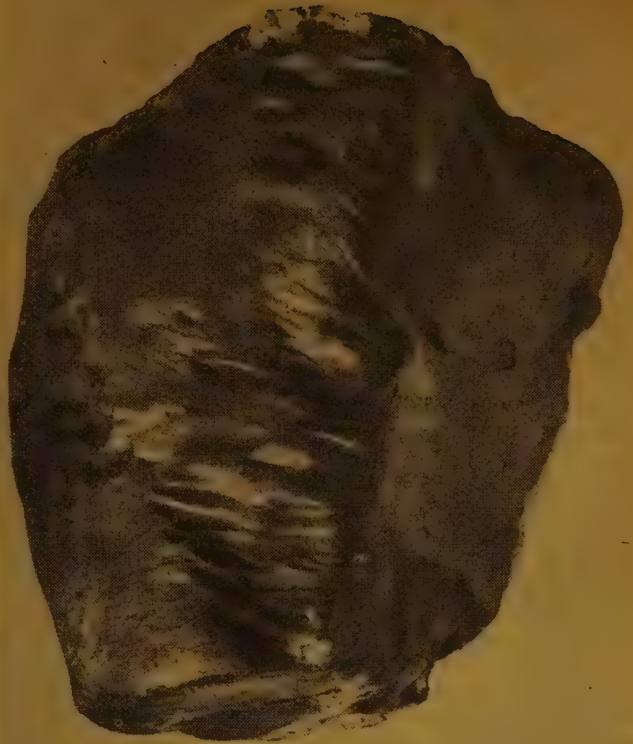
VERY REV. PRINCIPAL A. MARTIN

Fragments from Another World?

CAREFUL CHEMICAL STUDY of meteorites has told us that some of them are stone and others made mainly of nickel iron—the one that has just been sent us from Rhodesia, where it was seen to fall a little while ago, is a mixture of stone and this iron. We know that our earth is made up of a rind or crust of stone, and a core of what from its weight seems to be a mass of nickel iron: so it has been thought that perhaps these fragments are fragments of wreckage from another one of the sun's family of satellites, perhaps even the fragments of a burst planet which was like our earth. Now lately the proofs of this have got distinctly stronger. First a meteorite of stone was found fallen in New Mexico. That stone was analysed with great care, and traces of gold were found in it. This is the first time that our familiar precious metal has been traced in a meteorite, and it gives one more proof that some object in space must have been made of the same stuff as our earth, and have cooled as our earth has cooled and so the gold condensed out in its rocks.

After chemistry has told us what metals and chemicals are present in a meteorite, we can go further and can find out how old it is. We can discover how long ago it was that it solidified into what it is now—hard stone. That is done by what has sometimes been called the Radium Clock. The heaviest element, uranium, which is present in minute amounts in rocks, seems always to be turning itself very slowly into lighter elements. And what is more, nothing that can happen to the rock seems to upset uranium. It goes on running down at the same pace whatever happens. As it does so it lets out into the rock minute traces of the gas helium. Now chemistry, or rather physics, can tell the exact amount of helium gas in a fragment of stone. So the age of the earth—the time when the world caked hard and got its rind of rock—has been calculated. Naturally this way of dating could be used for learning more about meteorites—and it has. Already the pieces of no less than 200 meteorites from different parts of the world have been tested in this way. And the interesting thing is that they all give the same date. These stones which have come in from outer space seem all the same age, and that age—of course we are only speaking roughly—is the same age as the radium clock gives to the earth itself. Here again is another proof that somewhere in space there once was a world probably like ours—tiny bits of the wreckage of which are constantly being thrown up from the ocean of space on to our shores. What was that world like? Had it come to have life? As you probably remember, a scientist some months ago published a paper to say he had found microscopic germs in the heart of a meteorite. He said he had found cocci, and some of these are the germs which give us boils and many other diseases.

But would not the heat of the friction of coming through the air kill any germs in the stone? Don't we see these stones burning like torches across the sky? That is true, but careful study now seems to have shown that part of the time that we see this light, the meteorite itself may not be burning but because the upper air is being pressed away in front of it so fast, it is this we see



Main portion of the meteorite weighing 60 lbs. which fell in Southern Rhodesia last March. The Southern Rhodesian Government has presented this fragment to the British Museum

By courtesy of the Natural History Museum

blazing, and not the stone itself. A moment later, as it makes the final plunge to earth, the stone itself burns, but that may be for only a few moments and it does not seem quite certain that the heat must reach germs bedded well inside, in time to bake them.

GERALD HEARD

Milk for the Schoolchild

ABOUT SEVEN YEARS ago the National Milk Publicity Council started a scheme for milk in schools. It has grown year by year until nearly one million children are now being supplied each day with one-third of a pint of milk at their schools. For this today they pay a penny.

One million out of six is not enough: so since the organisation of the Milk Board the Government and the Milk industry—producers and distributors alike—are co-operating in a new scheme. This will enable the children to have milk at something approaching wholesale price—one-third of a pint for a halfpenny. All full-time schools or courses for children or young people recognised for grant by the Board of Education come within the scope of this scheme. The milk will be subject to the approval of the local Medical Officers. Don't get led away by the idea that this is somebody's 'spare milk'. It is exactly the same good milk that is available for whatever towns or villages the children live in now, with the added security of the school Medical Officer's certificate, and the County Medical Officer over that. A lot of public spirit and hard work has gone to perfecting the scheme since Parliament passed the Milk Act this summer. The National Milk Publicity Council laid the foundation. A Committee under Lord Astor is now advising the Milk Marketing Board on its development. The Government is finding part of the cost; the Milk Marketing Board is finding part; and the dairymen are contributing by doing this work for much less than the normal distribution allowance.

Milk producers and retailers who are interested should write without delay to the Milk Marketing Board at Thames House, London, for particulars. Teachers will get information from their Local Education Authorities. Parents will get a leaflet which is being distributed at the schools. Let us have three million children in the scheme before Easter!

RT. HON. WALTER ELLIOT, M.P.

'This Freedom'—XIV

Liberty in the Society of the Future

By MICHAEL ROBERTS

This article, giving a young man's views on the future of liberty in our society, concludes the symposium which has been running in our pages this summer and also serves to introduce the new series of broadcasts discussing the question of 'Freedom and Authority'

THE essays in this series have all insisted that the notion of liberty is complex, that the right of free speech and the right to change a Government by vote must be preserved, and that these rights cannot be preserved if the economic system itself produces discontent. The essayists have reminded us of Burke, Aristotle, John Stuart Mill; they have not forgotten Hobbes or Bagehot; and they have, by implication, recognised the force of Cromwell's saying: 'Each sect saith, "O, give me liberty". But give it to him and to his power and he will not yield it to anyone else'. Liberty, however ill-defined, is a notion to which the English people are so firmly attached that no one dares openly to oppose it. Among the contributors themselves there has been a remarkable unanimity; we can accept the arguments of Major Attlee as we accept those of Mr. Macmillan, though we may doubt whether the economic interests behind their respective parties will allow them to be as statesmanlike as they themselves would wish. Nevertheless, their writings, like those of Mr. Douglas Jerrold, reflect the increasing tendency to talk less about the rights of the citizen and more about his duties. In order to defend their economic position, people are willing to sacrifice some of the old political doctrines and to recognise the necessity of co-ordination and co-operation. That willingness to submit to authority may itself be dangerous, unless the nature and scope of that authority is clearly recognised. In particular, we must avoid the assumption that authority necessarily means the authority of the executive government. The government is concerned with the problems of the moment; authoritative opinion should be independent and more far-seeing. Whatever the necessities of the economic situation, responsible opinion cannot, in the long run, be wisely directed by dictatorship.

From time to time experimental changes in the law must be made, and the political structure of the State must be such that we can, after a reasonable period, reverse those changes without revolution. In these matters it is not the possible restriction of some people's liberty which needs to be discussed, but the reversibility of the change. Any change in the law may be welcome to some, yet unwelcome to others; and any law may be irksome to us at times though we approve it in general, for a law or convention is often an instrument which prevents us from giving way to our own weaknesses. A dictatorship is bad because its decrees are not easily reversible. No one doubts that the main body of opinion in this country is opposed to violent methods of dictatorship, and will remain opposed to them until goaded to desperation by poverty. But more subtle methods are possible.

Propaganda: The Weapon of the Future

Propaganda is the weapon of the dictator of the future: education, the cinema, the press, the hoardings and the wireless have never yet been fully exploited. The British Government, following the Russian example, is just beginning to advertise itself. Supposing war and economic disaster are staved off, how far can this process go? Can it produce a nation of happy, docile, uncritical citizens? And if so, is such a state desirable? If not, what are the alternatives?

First of all, I do not believe that complete success is possible; unless we condition the responses of children much more carefully than we do now, human beings will continue to react against their teaching. It may be possible to control and stereotype the development of human beings, and attempts to do so will certainly be made, but the human mind is a sensitive organism, and the smallest differences in heredity and experience can produce incalculable divergence in opinion and outlook. Nevertheless, a moderate degree of success is probable: persistent drilling of opinion may produce a nation almost completely homogeneous and contented. I believe such a State to be bad, not only on the absolute

unquestionable grounds which any Christian would accept, but also on pragmatic grounds. The system would not work.

Nine times out of ten, perhaps ninety-nine out of a hundred, the heretic is, as he appears to be, a degeneration from the normal, but once in a while he is a man who has seen clearly problems which will concern the mass tomorrow, and which must be solved by new methods and a new outlook. If you repress the heretic completely, your State becomes fossilised, it cannot adjust itself to new conditions. If you wait till the necessity is upon you before you allow your pioneer free play you will probably find that it is too late.

And if you are to tolerate the pioneer, you must also tolerate the crank, for you cannot devise a mechanical test to distinguish between them. You can sometimes distinguish the intellectual pioneer from the crank: he knows more and takes more into account. But the moral, and the æsthetic, pioneer? How can you be sure that their specious doctrines, true perhaps in all their details, yet making a false emphasis, will not mislead the masses? The only safeguard is education and tradition, and today tradition is threatened not only because the orthodox upholders of tradition have sometimes been stiffnecked, literal-minded, and concerned only with their own class-interests, but also because of our reckless and chaotic use of propaganda.

Who Controls Propaganda?

The increase in power of the instruments of propaganda in this century is as striking as the elaboration of instruments of production in the last. Perhaps it was necessary that industrialism should be developed by private enterprise; the risks were of a kind which had to be taken by an individual, and to induce him to take them, he had to be offered the reward. But can propaganda develop in this way? And is it right that it should? Risks in this case are run by the public at large, willy-nilly; do such risks outweigh the financial risks of the promoter? The instruments of propaganda exist, and will certainly be used by someone: are they to be manipulated by the Government, by profit-making private enterprise or in some other way?

The first method is, I think, disastrous. The second is muddle: the man who can make money out of the crowd—the kind of criminal who can 'sell a refrigerator to an Eskimo'—is not likely to be the best source of opinion or to be concerned with the work of education. The third system involves a reversion to the old idea of Church and State, the Church as the moral and educative body, the temporal Government as the instrument of the popular will. It is, I believe, the only enduring system and the only one which is morally right. It is the only one compatible with liberty as it has been defined in these essays.

Church and State

Some of the dictatorships in Europe today differ radically from those of the past: they admit no outside authority whatever. The truth of a statement is, they say, not something absolute, but its value for some particular purpose. And since the State is more important than the individual, the authoritative truth is that which must be beneficial to the State. Only the Government can judge what is beneficial to the State, therefore the Government, if the State is to conserve its existing form, must dictate the opinion of its subjects.

Such, in brief, is the argument of Stalin and Hitler; it is, I believe, fallacious in every step and mistaken in every premiss. Grant for the moment that all truth is relative to a known purpose, grant that the State is something more, and more important, than the sum of all its citizens, grant that authoritative truth must be inculcated, and will not be discovered by men in free inquiry; even granting all these

(Continued on page 573)

The World on the Move—VI. Spain



Popularising the Spanish Navy: recruits doing gymnastic exercises on the roof of the Marine School in Madrid

E.N.A.



Men of the Political Police Guard, a body of sharp-shooters formed recently 'for the purpose of attack in case of necessity'

E.N.A.



Advertising in a remote Spanish village

Photograph: Paul Nash



Feeding the unemployed at a welfare centre in Barcelona

E.N.A.



Demonstration against agrarian changes in Catalonia



Industrial Spain (Ore Port near Bilbao) is not very different from its counterpart in other countries



State lotteries are an important feature of Spanish life. Preparations for drawing the National Summer Lottery—



—and three of the unemployed who stood for four days and nights at the head of a queue in order to sell their places to view the draw



A trade that flourishes in Spain: a public letter-writer's booth in Barcelona



Emancipation! Professional women wrestlers taking part in a championship staged in Madrid

Photographs: E.N.A.



Turning a river bed into gardens and allotments under the Toledo Bridge over the Manzanares River

E.N.A.



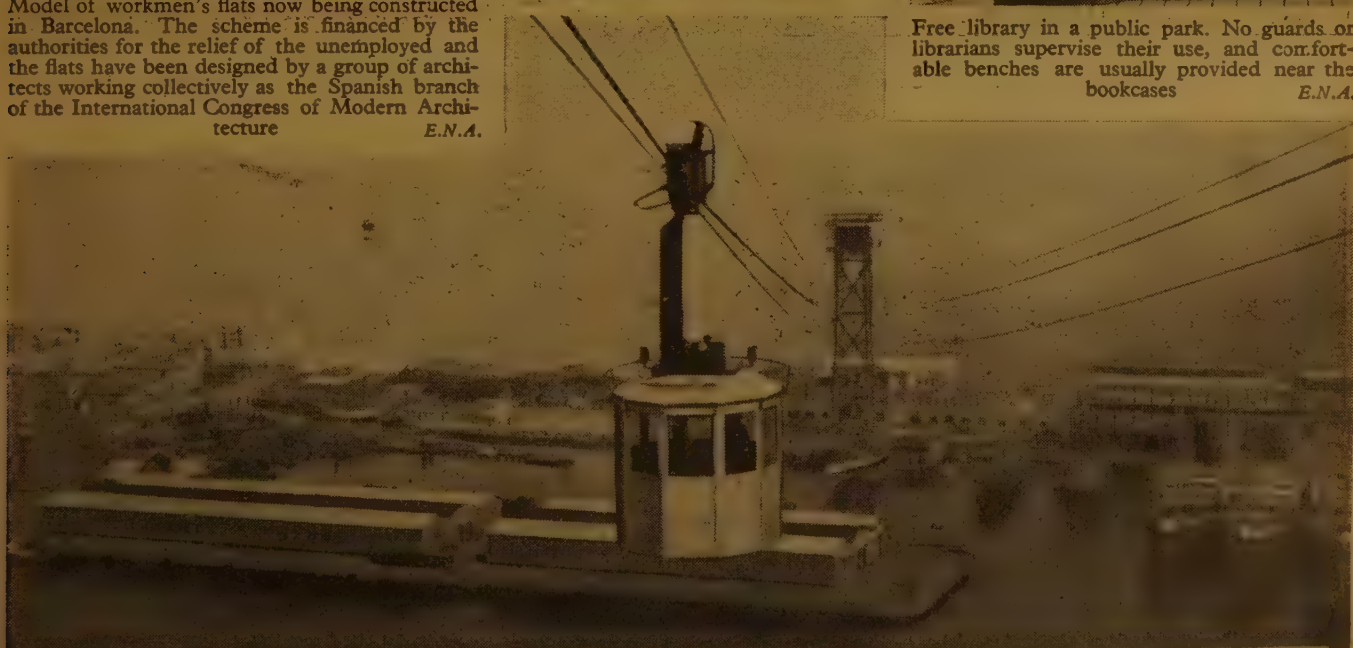
Model of workmen's flats now being constructed in Barcelona. The scheme is financed by the authorities for the relief of the unemployed and the flats have been designed by a group of architects working collectively as the Spanish branch of the International Congress of Modern Architecture

E.N.A.



Free library in a public park. No guards or librarians supervise their use, and comfortable benches are usually provided near the bookcases

E.N.A.



Barcelona has now a sky railway which spans her harbour. The whole journey takes about fifteen minutes, but passengers can stop at the middle pylon and refresh themselves in the café at the top

Photographic Publications, Ltd.



Passers-by stop to study a display of political propaganda posters in Madrid during the recent Spanish elections; and (right) a nun casting her vote in the ballot box

Wide World



One of the Brothers of St. John of God, the only Spanish religious order permitted by the Republic to carry on its work in Madrid, where at the College of St. Raphael they care for chronic invalid and crippled boys

E.N.A.



An innovation in Republican Spain—free legal advice for poor people: a typical scene in the Consultorio Juridico Gratuito at Madrid

E.N.A.



Interior of a church at Briones after the building had been burnt and pillaged by the mob

E.N.A.



Barcelona copies Berlin in its Spanish Race Festival, inaugurated to preserve the purity of Spanish blood and extol the fraternity of Spain and Spanish America; this banner with three violet crosses and a rising sun is the chosen symbol of racial purity

E.N.A.



Gendarmes and Civil Guards summoning a suspected Communist of Saragossa from his home, after many outrages had been committed in the city

E.N.A.

it does not follow that authoritative opinion must (or can) be inculcated by force or by deliberate propaganda, or that the Government is the fit body to control that process.

The man who is fitted for leadership in the conduct of public business, the adjustment of conflicting interests, and the codification of points of public morality is not necessarily fitted to be the custodian of knowledge and tradition, whether scientific, æsthetic or moral. As a politician, he is particularly unfitted. Concerned only with immediate issues, he is likely to be shortsighted; anxious to remain in office, he is likely to prefer doctrines favourable to himself; concerned only with public affairs, he is likely to overestimate the importance of the State and to underestimate the value of the individual. He will be a strong represser of sedition. But seditious doctrines arise only if the economic and legal system is an inadequate embodiment of existing morality, or if the Government is incompetent, or if the citizens are ill-informed and ill-educated. In each case, the Government is itself to blame, yet it will tend to use methods of force and repression to defend itself. And the more it uses propaganda as its instrument, the more desperate will the revolutionary become; for the right of free speech becomes useless if the real instruments of conversion, the press, the cinema and the wireless, are in official hands. Democracy under a competent system of Government propaganda becomes a sham, and the few who are intelligent enough to resist the propaganda will see no hope of change until they themselves seize and control the instruments.

The only practicable and stable method is to place these instruments unreservedly in the hands of disinterested and independent men, men who would, in some sort, constitute a Church. No system can be completely and permanently satisfactory, and the failure of the Church in the past warns us not to expect perfection. But that is no reason why we should deliberately choose a system obviously worse. The Church in the past sometimes denied doctrines which were demonstrably true, it often acted in the interest of one class rather than another, and it allowed education to be taken out of its hands, but at least it supplied and maintained an outside standard by which acts of Government could be judged: Colet could preach to Henry VIII, when that monarch was feverishly preparing for war, that 'when wicked men, out of hatred and ambition, fought and destroyed one another, they fought under the banner, not of Christ but of the devil'. And if it be true that Henry convinced Colet of the necessity of his preparations, that also shows the proper relation between State and Church. It is in no case the business of the State to dictate what doctrines shall be taught or what facts shall be emphasised by the corporations controlling propaganda; but the corporations should have the fullest access to the facts and the widest liberty of judgment.

The Functions of a Church

If we are to defend liberty we must attack the doctrine that the State can be the sole source of intellectual authority and moral discipline. And in so doing, we must recognise that there is, outside the Church, no other vigorous political theory in Europe today. In the liberal democratic theory it is assumed that the functions of a Church would, in a 'free' country, automatically be fulfilled by an undefined and unofficial moral and intellectual aristocracy. In practice, a liberal Government tends to place those functions under the control of Government departments. And the Church has tolerated this state of affairs. Today, Dr. Carpenter has told us, the Church is making 'the old Christian assertion that human personality is more important than property'. Too often it has left the risk of making such assertions to laymen, like Cromwell: 'If there be any one that makes many poor to make a few rich, that suits not a Commonwealth'. If, indeed, Churchmen are in earnest this time, and are not merely saying, a little in arrears of ordinary men, the ordinary decent thing, if the Church is going to recruit young men fitted for intellectual and moral leadership, then perhaps it may again take its place as the counterpart of the State, and serve as a rallying point for all such intellectual and moral forces. But whether this happens or not, it will remain true that the body which fulfils the functions which the Church claims to fulfil must be entirely independent of the State.

The difficulties which at present prevent us from making the world a more comfortable place for most of us are not practical difficulties in the old sense. There is, from the point

of view of Western Europe, no great shortage of machinery, labour, raw material, or physical and chemical knowledge. The difficulties are practical in another sense: we are not up against the intractability of matter, but the intractability of human nature. We know very well the general direction in which we want to move, but we find ourselves opposed by a jungle of interrelated and conflicting interests. One remedy is to force a way through, the other is to train the branches to grow elsewhere. The first depends on law and force. The second depends on persuasion. It is, I believe, the method of Christianity.

The Limits of Persuasion

The essential division in politics is neither the line between rich and poor nor between professing Communists and Christians, but between those who instinctively trust their fellow men, even if they are strangers, and those who fear and distrust them. The former talk of morality and co-operation, the latter of expediency and the struggle for existence. To the latter, 'human nature' means 'brutality and avarice'; to the former 'kindliness and sympathy'. In practice, most of us find ourselves somewhere between the two extremes. In times of prosperity we lean towards Christianity, co-operation and civilisation; in times of hardship and danger we return to the doctrines of Nationalism and 'every man for himself'. And the men who believe such doctrines, whether they are Englishmen or Germans, are the enemies of civilisation. They force wars and Sedition Bills and fallacious racial doctrines on us because they are afraid that they cannot hold their own against foreigners and strange ideas unless they return to the methods of barbarism.

There will always be a minority of such people, just as there will always be a minority of people whose complete trust in others seems to most of us admirable, but dangerous and foolhardy. When the question at issue is one which concerns only the individual, there is no need for the community to apply any force except the general weight of opinion. But when the question concerns the well-being of others as it does in such matters as slavery, profiteering and waste of national resources, then there comes a moment when the minority must be coerced. In the last war, the civilised minorities in Europe were imprisoned or shot. Sometimes, as in the Factory Acts and the criminal code, it is the uncivilised minority which is coerced. We cannot wait to persuade everybody. Christianity itself recognises the necessity of law.

But on this point we must be clear: if an action is thought to be wrong, and injurious to the community in every instance, then it must be forbidden. If it is thought to be wrong, but only injurious to the community if it becomes common, then it belongs to the domain of tradition or convention. If a matter belongs to the realm of law at all, the law must reflect the public morality. What opinion, convention and tradition cannot prevent, the law must forbid. And it is the business of the Government to administer public business and to codify opinion, not to dictate it.

Education

The danger of placing the instruments of propaganda in governmental hands is shown in education. The Board of Education is allowed a quasi-independence, there is no overt insistence on the teaching of particular moral or æsthetic doctrines, but no attempt is made to find the best people for the work, and teachers are not helped in their own further education. They are expected to give sympathy and understanding to fifty human beings at a time. The task becomes impossible, 'education' becomes a matter of discipline and coercion, and the system produces the diehard mentality, which is one of fear and distrust of strangers. It makes it difficult, from the beginning, for the child to enjoy life decently: there can be no freedom worth having for those who are neither given a decent material standard of life nor educated, through the influence of people who are themselves civilised, to enjoy it and maintain it. Education in the schools (distinct from education by books or the wireless) should be a matter of the influence of personalities. Instead, children are taught just enough to become dupes of the press or devotees of the cinema, and not enough to detect a bad argument or a piece of sentimentality: they are made amenable to propaganda, but not to persuasion; the personalities of the teachers themselves are

warped and stunted, and when the children behave as one might expect, the diehard blames education, instead of the lack of it.

Freedom of speech and democratic government are valuable only if they are genuine; if the individual is being helped to make the best of his abilities. They are worthless shams if there is Government control of teaching and of propaganda. And genuine free speech and democratic government are bound to be disastrous unless we have a sound economic system, and a sound intellectual, moral and æsthetic tradition. In England today the control of opinions is partly in the hands of the Government, partly in the hands of circulation-managers, and partly influenced by a miscellaneous collection of journalists, bishops, dons, scenario-writers and politicians. Things might be worse, and they certainly will be worse unless we act. The economic system itself cannot be put right without moral enthusiasm. We must defend liberty not merely by the usual mass meetings against this, that or the other petty governmental tyranny, but by an effort to begin, at last, the work of general education. Newspapers must be offered

which are run by disinterested men, for reputable motives. The cinema must be used by others besides the money-snatchers. We must reintegrate and extend beyond its old class-barriers that tradition which represents not the conventions of a single class, but that accumulated wisdom, and understanding of our fellow-creatures and our own limitations, without which liberty of thought and action leads both State and individual to sentimentality, short-sightedness and futile violence.

I do not suggest that the opinions which I have outlined are held by any large number of young men and women. But I think they represent the conclusion towards which many people are working. The reaction against *laissez-faire* economics, nineteenth-century liberalism, and intellectual anarchy is right and necessary, but unless we are careful, unless we distinguish between the functions of Church and State, and the nature of intellectual and civil authority, it will be used, as it has been used abroad, to establish, in the temporary interests of a minority, a State inherently unjust, inflexible and unstable.

Our Bill—IV

The Whole Duty of a Cricket Umpire

By F. H. GRISEWOOD

WE were in the throes of an unprecedented summer. Day after day the sun had blazed down upon our brown land—until the earth showed great cracks in its surface, and in some neighbouring villages the lack of water had become a serious menace. Our garden had become a very Sahara—plants were flagging for want of water, and although we carefully drenched some of our more precious possessions, we were knowledgeable enough, under Bill's guidance, to use the water-can very sparingly. 'Once you starts to water', said Bill, 'you 'as to keep on a'waterin'. Fur better to keep the 'oe a'movin' the soil round the roots'.

So the days Bill visited us during that summer were given up to a general tidying—there was little or nothing else that we could do—and we waged an intensive and highly successful war on the weeds. 'You only 'as to cut 'em in this weather', was Bill's advice, 'an' you won't 'ear from them no more', which was perfectly true.

In our leisure times, and they were many, our conversation turned to cricket. Bill, on the subject of our national game, was *laudator temporis acti*! 'Cricket ain't wot it 'ad used to be', he said, 'they makes the pitches too good for one thing. I went to Cheltenham some years back to see the county play against they 'Orstraylians. Call it cricket—I've never sin the like in all my natural. It were more like that there croquet game than cricket. They 'it the ball—when they 'it 'im at all—all along the ground, never raised 'im once they didn't. They kept a'messin' about keeping it out o' their wickets wi' their pads. I'd 'ave 'ad 'em out quick if I'd been standin' at umpire.

'But nobody didn't seem to take no notice o' that. You'd 'ave thought as they was all used to it. Well that wouldn't 'ave done fer us. If the ball 'its you on the leg in our matches there's a roar as you can 'ear a mile off, an' if it's not your own umpire as 'as the say, out you 'as to go. You see, sir, it be all in the game—but there they was with the ball fair rattlin' up against their pads an' ne'er a one said anything. I don't call that cricket, do you, sir?

'An' as fer that pitch—I 'ad a close look at it when they players 'ad gone in fer their lunch—it were a lovely bit o' turf, sir, more like a bowling green nor anything else. T'wasn't no good for cricket. All the time I were a'watchin' I never see a ball go a'flyin' over the batsman's 'ead—like it 'ad ought to. They be the sort o' balls to get the wickets. The batsman, if 'e ain't afeared, 'as a sort o' slash at 'em an' very like tips one into the longstop's 'ands. Many's the good batsman 'ave I sin get out like that. But you couldn't do nothin' like that on that pitch at Cheltenham—it were terrible dull.

'There were only one man as played proper at all—an' that were that Jessop. By goy, 'e didn't stand for no nonsense! 'E 'it the clock tower once, ever such a crack—came a' jumpin' out at the ball like a tiger. 'E didn't set no store on all their twisters an' things, treated 'em all alike, 'e did. Ah, 'e were

a fair treat to watch. When 'e come out I come away. I couldn't abide to watch no more.

'But we 'ad used to 'ave some fine games in this village afore the War, sir, when Master Fred 'ad used to live 'ere. You never knewed 'im, did yer? 'E 'ad used to be Captain o' our side, an' there weren't many places as could do no good again' us—not in those days. But there's a lot more in village cricket then you'd credit, sir. I see as they 'Orstraylians 'a' brought a team over this year—that Bradman—they do say as 'e be a wonnerful bat like but . . .

'You can talk about your Bradmans and your Hobbses and the like—and I ain't a'sayin' but what they don't cut a lot of runs—but that's in this 'ere 'igh-flown sort o' cricket, but when it comes to the real thing, cricket as 'er 'ad ought to be played, on the village green with Squire standing the tea, and "The Spotted Dog" nice an' 'andy in case any of the players gets a thirst—then there's only one chap on the side as counts at all—an' that's the umpire. Many's the time I've seen a good umpire put out a side quicker'n any bowler can—an' easier, too, 'cos when it comes to it 'is word be 'law, an' if 'e says you're out, out you 'as to go: an' if 'e's the village blacksmith it ain't no manner o' good you tryin' to argue! The only thing as you can do is to lay for 'im on a dark night an' 'it 'im with something an' clear out quick—but you 'as to be smartish then, an' take good care as you don't miss.

'O' course there be all sorts o' umpires, an' each one 'as 'is own way o' doin' things, but there's *one* match as stands out in my mind clear as daylight, an' one umpire as I'd stand a drink to whenever I sin 'im! An' that were Joe Allen as used to be postman in our village. 'E weren't much to look at, were Joe, but 'e 'ad a proper spirit to him—that 'e 'ad—an' wouldn't stand for nobody creatin' at 'im, not for a minute. Ah! a rare 'un 'e were for a cricket match. I've known 'im run the last three miles o' his round of a Saturday so as to be in time to stand umpire. Folks used to know when there was a match on 'cos they used to get their letters so quick.

'We was friendly with nigh all the neighbouring villages—our chaps used to go and help 'em in their football and cricket matches—but there were one place as we never set no store on at all—that we never. Us couldn't abide 'un. And that were Slopton-on-the-Wyre, about ten miles away. Us always used to say as no 'good ever came out o' Slopton, an' by goy it were true, too! Whenever any o' our little 'uns 'ad used to be naughty, their mothers 'ad only got to say, "Look 'ere, if you don't be 'ave yourself I'll take yer to Slopton", and that stopped 'un proper.

'Us didn't have no more to do wi' 'em than us could 'elp. But us allus 'ad a cricket match again' 'em. 'Twere an old custom as 'ad started when us were friends an' 'adn't died out. But o' course there were ever such a bitter feelin' about this 'ere match, an' 'twere allus a ding-dong struggle.

'To give 'em their due, there was one thing as they *could*

do—an' that was to play cricket. The year I'm a'talkin' about the match was on our ground. For weeks us 'ad worked in the evenings on the pitch, an' many's the chap as let 'is allotment go to blazes 'cos 'e were puttin' in all 'is spare time on the cricket ground—but us didn't worry much about that, times weren't so 'ard in those days as they be now, and us only cared for one thing, an' that was to beat those danged Slopton folk. Us 'adn't got a very strong side, neither, that year. Us 'ad some smartish bowlers, but with the exception o' Master Fred we 'adn't got many as could cut more than a few runs apiece.

'Us used to meet in "The Spotted Dog" in the evenings, arter us 'ad put in a bit o' work on the wicket, an' talk about our chances. O' course, Ol' Joe was allus there—you couldn't keep 'im away from anything to do with cricket, even tho' it were only talkin' about it. An' he allus used to say: "You leave it to me, masters! I'll win this 'ere match for yer, you see if I don't!" An' us 'ud laugh an' 'ave us another pint, an' then go 'ome to bed.

'Well, at last the day come, an' us all come back early from the plough an' such—us were allus allowed off early that day, 'cos of this 'ere match. An' us all got into our whites—Master Fred 'e were ever so okkurd about us all wearin' whites. Us 'ad used to play as us was, but 'e very soon stopped that, an' wouldn't let Tiny Wells wear 'is bowler 'at when 'e were a'playin' until Tiny bowled so many wides without 'un as it were dark afore the first innings were over. So 'e 'ad to let 'im wear it again. Tiny never couldn't bowl without 'is 'at on. I believe 'e used to go to bed in it, 'cos I've never seen 'im without it. 'E were a good bowler, were Tiny. Used to make the ball come straight up off the pitch, an' if the batsman were a'roachin' forward to 'im 'e used to get it under the jaw! 'E frightened many a one out like that. They 'ad used to come in all full of swank, an' start as if they were goin' to set about the bowling, but after they'd had a couple o' smacks under the jaw from Tiny they were fair muzzled, an' the only thing as they wanted to do was to get out, ah, an' quick. An' us used to see about that all right.

'About 2 o'clock all they chaps from Slopton comes along in a great big horse chara. Motors were scarce in those days. An' they all looked swollen-headed as if they 'ad won the match already. They was all turned out ever so smart, with blazers an' caps an' all. An' the whole village seemed to 'ave come wi' 'em—some on bicycles, and others in traps an' the like. You never see such a crowd—all a'singin' and a'laughin'—they didn't laugh much when the time come for 'em to go home again, though! But I'll come to that later.

'We was all a'standin', there, with Ol' Joe, who 'ad just finished 'is rounds. The captains, Master Fred an' their chap, tossed up, and Master Fred wins the toss an', o' course, 'e put 'em in—us allus did that 'cos there's a smartish 'little place one end o' the pitch as is just right for Tiny's bowlin'—that was what us 'ad been workin' at all these 'ere weeks—an' it didn't allus last for more than one innings—but that was generally enough.

'Their first two batsmen as come in were great strappin' chaps—one 'ad a sort o' felt 'at on 'is 'ead. They takes guard, an' the chap with the 'at stands up to Tiny's first over. 'Is 'at didn't stay on 'is 'ead long arter that though, 'cos the first ball as Tiny bowled knocked 'is 'at off—an' they run two byes afore us could get after it. The very next ball as Tiny bowled 'it the chap in the windpipe an' very nigh strangled 'im! It was ever such a long time afore 'e could get 'is breath again—an' arter that 'e didn't seem to care much about cricket at all! 'Cos when the third ball come along 'e steps off the square leg or somewhere, an' the ball never rose a inch but run along the ground an' cut 'is middle stump a'flyin'! You never 'eard such cheerin' in all your natural, and Squire's daughter 'er split 'er gloves a'clappin'. Well that were one on 'em gone, an' a good 'un, too, from all accounts.

'The next chap in were their captain, an' Ernest, our wicketkeeper, shouts out, "ere's a watty-anded 'un, you'll 'ave to cross over!" An' so 'e were, too. An' I 'as to go long-leg instead of third man. 'E looked a tough customer, an' 'e never flinched at all when Tiny's first ball at 'im went past 'is ear'ole like lightning—and the next one 'e 'it smack into the pond an' nigh killed one o' Mrs. Hunt's pet drakes as was 'ocklin' about there! An' all they Slopton folk sets up such a roar as you could 'ear it a mile off. The chap at the other end was one of those as never moved 'is bat at all—kept it in the block 'ole and just let the ball 'it it, or 'im, but us couldn't

get 'im out, try as us would. An' all the time their captain were a'pilin' up the runs, an' things weren't lookin' at all bright for us. So arter a bit Master Fred 'e chucks the ball to me an' ses: "Ere, Bill, you 'ave a go! Us can't get 'em out with good bowlin', maybe a bit o' bad stuff'll do the trick!" Well I ain't much of a bowler—I ain't as young as I were—but I takes the ball and goes on from the end where Ol' Joe was umpirin'. 'E weren't 'alf mad, weren't Ol' Joe, 'cos there 'adn't been no appeals against either of the batsmen.

'Well I bowls a ball or two quiet like, just to try an' entice their captain to 'ave a go, but 'e plays 'em back nice as nice all along the ground. The third ball as I put down swerved a bit an' 'it him on the leg. It wasn't anywhere a'nigh the wicket, but Ol' George, who were a'standin' at point, sings out "ow's that?" Up goes Ol' Joe's 'and—an' 'is face were a picture—"Out!" 'e sez determined like. "What did you say?" sez their captain, "I don't think I 'eard you right". "OUT!" yells Joe, "an' out you goes!" An' 'e 'ad to go. As 'e were a'goin' Master Fred come along an' sez: "That were a rummy decision o' yourn, weren't it, Joe?" "That may be, sir", sez Joe, "but it were the first chance I 'ad at 'im!"

'Well, we goes on a'bowlin' an' a'fieldin', an' in the end us manages to get 'em all out, but not afore they'd made 92 runs—which were a smartish total for a village cricket match, an' us weren't too sure as 'ow we could cut as many as that. But, 'owever that might be, we was more than ready to 'ave a go at it.

'Master Fred went in first, wi' Ol' George (as keeps "The Spotted Dog"). Ol' George were one o' the fattest chaps as ever I see—'e weighed nigh on twenty stone. 'E goes in an' takes guard from Joe, an' 'e looked like a great big 'aystack a'standin' there. The bowler at Joe's end 'as one look at 'im an' turns to Joe an' sez: "Ow be I to bowl—I can't see the wickets?" "You stop your rattle", sez Joe, "an' get on with your bowlin'—if it 'its 'im in front, it's leg afore, and if it 'its 'im be'ind, it's a wide!" So the bowler don't say no more, but walks to the end of 'is run—an' you never sin such a long run as 'e took—'e were very nigh lost in the brambles o' the mound at the far end o' the ground. 'Twere as long as the length o' a cricket pitch, were 'is run, that I knows 'cos I measured 'im.

'E comes a'gallopin' down to the crease, an' the ball fled out of 'is 'and and right over the long-stop's 'ead, an' goes to the boundary for four byes. Ol' George grins, an' sez, "That's easy! Gie us some more like that, master". An' the next one as comes down 'e snicks over slip's 'ead for another four. Well, we yells a bit, you know, an' the other folk don't like that at all.

'Well, to cut a long story short, us got 92 runs the same as them, an' 'ad lost all but one of our wickets. Master Fred were still in, an' there were only Bob Belcher to come, an' 'e were an oldish man as 'ad been still from cricket for three years, and us couldn't look to 'im for much.

'There were a silence like death when 'e walks in. Master Fred comes out to meet 'im, a'smilin', an' sez somethin' as none of us could 'ear, but I sin Ol' Bob grin a bit, an' nod 'is 'ead. 'E takes guard from Ol' Joe, an' the bowler as was on first goes back to 'is brambles—an' then somethin' 'appened as I never sin afore or since! Just as soon as 'e turns round an begins 'is long gallop up to the wicket, dang me, if the two o' they batsmen don't start a'runnin'. The bowler, 'e stops short, fair mazed, an' their captain shouts: "Run 'em out, Ted!" An' sure enough, the bowler throws at the far wicket—never 'it 'im though. Up goes Joe's 'and, an' "No ball!" 'e sez, as loud as the Crock-o'-Doom. An' by goy, it were too—an' us 'ad won the match. You never 'eard such a row as there was, in all your natural. 'Course, they sez as it weren't fair, but Ol' Joe 'ad 'em proper. What they sez was that the ball weren't in play afore it were delivered, an' Joe sez, "An' what about our Bill 'ere this artemoon? 'E were backin' up an' were out o' 'is ground, an' the bowler, instead o' bowlin', knocks the bails off, an' Bill were given out? If that's fair what we done's fair too, an' in any case your bowler threw at the wickets 'stead of bowlin', an' anyone knows as that's a no ball". Ah! an' they 'adn't nothing to say to that.

'An' so you see Ol' Joe were right when 'e said 'e'd win the match for us—an' that's a thing I shall never forget!

Mr. Grisewood's series of talks on 'Our Bill' will shortly be published by Messrs. Harrap & Sons, price 2s. 6d.



South front of Sheffield Park, showing magnolia in the foreground and trumpet creeper on the house

Six English Gardens—VI

Autumn Colouring in Sheffield Park

By RUSSELL PAGE

SHEFFIELD PARK, on the main road from East Grinstead to Lewes, and about nine miles from Haywards Heath, is one of the most exciting of a group of very important gardens in this neighbourhood. Sussex is a county of good gardens famous for flowering shrubs and above all for rhododendrons.

Like Sir George Holford at Westonbirt, the late Mr. Arthur Soames developed the lawn, lake and woodland round his house into a landscape specially planned for autumn colour. There are, of course, masses of rhododendrons and spring flowering shrubs, but now in middle autumn they have become no more than the background for the dying colours of deciduous trees and shrubs.

The approach to the house is through a park quietly planted with oaks and dark clumps of *pinus insignis*, one of the finest of dark green conifers. The house, creeper-clad, seems to retire into a thick belt of evergreens, and all here is quiet and grave. To walk under the dark trees through a little gate which leads into the garden is to come suddenly upon a different world, a world of light and colour. The first impression is one of a strange landscape where ordinary greens have become very precious. In most English garden landscapes green preponderates, a restful setting for flowers, and colour has always a wide green setting. Here the mown lawns leading down to the lakes, the gentle slopes up to distant woods and the winding paths among the trees are fringed by the many coloured flames of autumn foliage. Wide patches of matt-orange separate drifts of glittering grey-green. Bushes of flame and coral and cerise burn fiercely against the blue-greys and black-greens of conifers. Rounded trees of silvery yellow are set against the layered scarlet of Japanese maples, and everywhere are the gold torches of *retinospora* and tawny colours of the swamp cypress.

This impression is reinforced and varied a thousand times in an afternoon's walk through ninety planted acres. No detailed analysis of the garden plan is possible. There are four small lakes, the lower two at right angles to the higher ones, which lie to the east of the house. To the north are high woods, chiefly planted with rhododendrons. To the south and west there is a little dip below the house, then the ground rises very gradually. Native oaks and birches carefully thinned and grouped come close to the house on this side, and it is

impossible to mark the place where garden ends and wood begins, so subtly has the more sophisticated planting been merged into the open Sussex woodland. There are no flowers, no shaped beds, no formal vistas. The wide lawns near the house have no sudden boundaries, and though various walks are severally devoted to one kind of planting, or even to one genus of plants, the transition is so gently made that there is no sudden sense of change in passing from one theme to the next.

The house is late eighteenth-century Gothic. It is big, and, though treated with great gaiety, does not appear flimsy, like so many houses built in this style. The elaborate ogee motif is used everywhere—windows, tracery, doors, panelling: all reflect the influence of Strawberry Hill. Now it is covered with the 'orange trumpets' of *bignonia radicans* and *vitis henryana*, and near the southern facade is a huge tree of *magnolia grandiflora*. Except for a few enormous clipped half-standard Portugal laurels and a flight of steps edged with yew, there is no formality.

There is a little dip to the south of the house beyond which the ground rises to a shallow ridge called the Red Brow. To the west a belt of trees is allied to the garden scheme by wide plantings of savins and rhododendrons. Here and there are specimen trees, including a fine *cedrus atlantica pendula glauca*, its foliage exactly the right contrast to the huge patches of *berberis thunbergii*, whose autumn colouring gives this part of the garden its name. Several birch trees have been left on this slope and stretches of bracken among the shrubs gain a new sheen by contrast.

The curling path along the ridge is flanked by broad masses of *berberis thunbergii*. Its orange foliage and scarlet berries form here a glowing base for the dark greens of hemlock (*tsuga canadensis*) and *pinus insignis*, the impressive red of *quercus cocinea splendens* and the smaller but equally lovely trees of *primus sargentii* (tawny-scarlet now and lovely in early spring with single pink flowers). Here, too, are bushes of various cotoneasters, including *c. frigida*, *c. henryi*, *c. serotina* and many fine specimens of *photinia variabilis*. In a sheltered corner is *rhus potaninii* from China, one of the most beautiful of all the Sumachs, and one which will do well on chalky soils, and also here is *pyrus vilmorinii*, now at its best. Its falling leaves are a curious brown-purple and set off



Ornamental grounds below house



One of the fine groups of trees

Photographs taken for THE LISTENER by Edgar Ward

its clusters of pinky-red berries. This species is perfectly hardy and very beautiful. It comes from Western China and might be planted much more frequently.

The planting along this walk shows the possibilities for a pageant of colour which will extend the garden season into mid-November. It shows, too, that a few subjects generously

planted will make a far better effect than a collection of many different things, however interesting each may be in itself.

At the end of this path there is a short walk to the right, devoted almost entirely to conifers. Where it begins there are huge trees of *cupressus macrocarpa aurea* whose magnificence amply vindicates the use of variegated trees in the garden.

Many of these conifers have made unusual growth. *Cupressus wisselli*, loveliest of all for sheer beauty of form, texture and colour, is twenty feet high. *Cupressus fletcheri*, well known as a dwarf tree in many rock gardens, is here an eighteen-foot column of feathery blue-grey. *Juniperus farreri*, 'the coffin juniper', still fairly new to this country, has already reached seven feet, and the lovely green lances of *Cupressus leptoclada* are of unusual height.

Among these conifers are several big bushes of the Japanese maple called 'Osakazuki', the best colourer of them all. Now in late September its finely-designed leaves are still green, though every tree is heavy with winged seed-pods of darkest crimson. Later they will be the most vivid patches of scarlet in the garden. Under one such tree a colony of white spotted scarlet toadstools add their voluntary note of colour.

Beyond, a winding path, called the Gentry Walk, swings left-handed through wilder ground where groups of *nyssa sylvatica* and *euonymus* species are planted among wild silver birch and heather. This path is edged with raised beds, piercingly blue now with thick mats of *gentiana sino-ornata*. This use of blue sharpens and enriches the quiet tones of heather and birch bark. One such association of blue gentian against the cerise leaves of *euonymus alatus* and the white shafts of the birch trees seemed to crystallise in the simplest way the whole theme of this part of the garden.

Soon we come to the lowest of the four lakes. An oak wood at the upper end has been opened up to allow for big plantings of Pampas grass and gunnera close to the water's edge. Thus they can be seen as they should be, across a wide stretch of water. In most gardens where there is not sufficient room one is so close to them that they throw all ordinary planting completely out of scale. Patches of coral coloured and Japanese maples show that we are still in the garden though the lower end of the lake is left alder-edged and wild.

There is so much autumn interest in this garden that the rounded masses of rhododendrons and thick herbage of naturalised primulas and meconopses seem scarcely in evidence. They are everywhere—telling of an early summer display which must be unsurpassed.

A large group of eucryphias guard the path across the dam which retains the lake above. To the north across this lake are woods of oak and Scotch fir, the eastern bank is made cheerful by red maples and golden retinospera glowing in the woods, while to the west more red maples clothe a bank above which

are the two smaller lakes towards the house. The surroundings of these last are more sophisticated. The outlet from each falls under a balustraded bridge. Mown grass sweeps to the edge of the quiet water starred with pink and crimson water-lilies. The lawn between the water and the northern wood has several fine specimen trees. By Wellingtonias shelter outlying clumps of the rhododendrons to which all the side of the garden is devoted. A giant 'Noble Fir' (*abies nobilis*) shelters with its glaucous branches a whole colony of wild cyclamen in every colour between tender white and madder-crimson.

On the left of this lake a narrow path leads back to the collection of conifers. It runs through ranged shrubs and is called the 'Red Walk'. Nearest the path are *berberis thunbergii*, *vaccinium corymbosum*, *v. pennsylvanicum*, Fothergillas from America with creamy bottle-brush flowers, a good autumn foliage and a big collection of the extravagantly named Gaylussacias. Behind them various *euonymus* (*e. alatus*, *e. alderhamensis*, etc.), *cornus florida*, *cornus rubra* and *disanthus cercidifolius* lead up to main tall plantings of *photinia*, *nyssa*, scarlet oak, *sorbus discolor* and *oxydendron arborea*. Once again here is evidence of brilliant gardening. The theme is simple, the repetition of cornus down each side ties in the composition, every plant has enough room to develop to its fullest extent and yet there is no look of bareness. Although plant families from every corner of the earth are represented they are so skilfully cultivated that they all seem happy and at home.

The urned and balustraded bridge between the two upper lakes acts as a co-ordinating link between the upper and lower parts of the garden and offers views which embrace enough of the garden scene to crystallise an enchanting experience. Upwards across the water and the rising lawn thickly clumped with roses, magnolias and maples, lies the house wreathed in coloured vines. Downwards beyond the grass-framed second lake is a dark huge clump of pines, and a distant bridge is framed by symmetrically disposed clumps of retinospora and maple. To the left is the dark green of the rhododendron wood; to the right an ordered confusion of many-coloured trees and shrubs happy among the wilder growth which has not been altogether cleared, and far away the soft lights of autumn strike notes of gold and crimson in the distant woods.

The gardens of Sheffield Park, Uckfield, are open to the public on October 6, 13, 20 and 27.



View of lake and woodlands

Photograph taken for THE LISTENER by Edgar Ward

The Stage in the Countryside

By MURIEL KENT

A short account of the progress which amateur drama is making in village life today

THE recent opening of a home for the Welsh National Theatre at Llangollen, the programme offered by the Winchester Festival of Music and Drama, and the Historical Pageant held in Shropshire, are among many indications that a vigorous art has been awakened in recent years and is being practised all over the country. Miss Mary Kelly, who founded the Village Drama Society (now incorporated as a very active section of the British Drama League) sixteen years ago, was able to report, early in this year*, a great advance in the provinces through the work of County Committees, or the special committees appointed to deal with the subject by Rural Community Councils.

The members of these bodies are able to give the most practical kind of help to village players, by their knowledge of local possibilities and difficulties, by suggestions made on the spot, and by organising instruction classes and competitions with other teams. In Cumberland, for instance, as the result of the formation of a County Committee a year earlier, the League came into touch with sixty dramatic groups—instead of only fifteen—and there was also a proportionate increase in the entries for the Community Drama Festival of that area.

The Board of Education, realising 'the educational value of this work to the countryside', has encouraged its development in various ways; provincial universities and colleges have given valuable co-operation; and the great organisation of Women's Institutes has provided an incentive and a framework everywhere. No general statement of the growth of the movement, however, suggests its vitality so clearly as the annual reports sent in by many of the V.D.S. branches, and published in a double number of the journal already mentioned. It is remarkable that more than 10,000 villages are now numbered in the League's books; but still more significant to find some small community forming a band of actors who are no longer content to produce a hackneyed piece, but choose a play by Lady Gregory, Synge, Galsworthy or Tchekov.

One Cotswold village, with a population of under a thousand, undertook the Poet Laureate's *Tragedy of Nan* so successfully that the players were engaged to repeat the performance in many other places. Mr. Masfield not only gave permission for this production, but directed some of the rehearsals and acted as prompter on the first night.

The North can show a good list of thriving dramatic societies. For example, a Yorkshire village, having a population of only 250, musters twenty-four members; and this company, since it was formed in 1930, has twice been placed near the head of the list in competition with town teams at the Sheffield Drama Festival. Their present producer has written two or three of the plays performed, and also designed the scenery and costumes for them. A 'Crafts' group makes the whole of the properties required, and supplied a highly effective setting for a Nativity play recently presented.

An increasing number of village players now undertake their own wardrobes, etc., instead of hiring; and it is not rare to find a playwright among them. Occasionally an episode of local history is chosen for the theme and dialect plays are given now and then; but pageants are a more popular expression of the spirit of the neighbourhood; and sooner or later most teams attempt Shakespeare.

Devon, where the general movement for the revival of village drama had its beginning, held its eighth annual Festival at Tavistock last year, when the performing groups (non-competitive) reached a high standard. Cornwall has followed suit, and the Falmouth Opera Singers produce 'classical and modern works of genuine musical interest'. Somersetshire has a number of talented companies, including one which specialises in Shakespearean plays or scenes; and a panel of approved advisers in dramatic production. The county's yearly Festival ranks as a regional competition of the National amateur contests. A Somerset team, therefore, which gains the highest marks in these Preliminaries is qualified for the area competition at Bristol; and, if successful there, passes on to the Finals held in London. In addition, this and other county organisations now offer trophies in the shape of shields, cups or ban-

ners to the local team which is placed first by the adjudicator.

The Rural Community Council of Lindsey has taken a leading part in experimental methods based on 'the educational approach to the drama'; adopting wide schemes of cultural and technical study in that specially rural county. Tutors from the University Colleges of Hull and Nottingham have given courses of teaching dealing with the origins and literature of drama and its relation to social life through the centuries. At the same time, the many hundreds of students attending these classes at various centres have been encouraged to form groups under local leaders for practical work.

The Lindsey R.C.C. also arranges a Summer School each year, lasting a week, 'during which intensive instruction is given in each aspect of play production, and where the students get to know each other and to feel that they are all engaged together in a county-wide movement'. The results of all this training, coupled with enthusiasm, were apparent in the local festivals held last year, preparatory to the County Final. In the words of an expert who was present: 'Here we had a wide variety of plays, chosen with discrimination and produced with every mark of thoughtfulness and imagination. Scarcely any of the productions lacked some mark of distinction and four or five of them were really strikingly beautiful'. Some two thousand persons paid for admission to the Festival performances, and showed themselves not only attentive but discriminating audiences.

The people's natural love of drama is being fostered and developed in Kent, Hertfordshire, Cheshire, Suffolk and many other parts of England and Wales; each district making its own characteristic contribution to the strength of the movement.

In Scotland there has been extraordinarily rapid progress in the art of the theatre since the benefits of the Music and Drama Fund granted by the Carnegie U.K. Trustees were extended to that country three years ago. This is administered by a joint Committee with headquarters at Dunfermline, and a Scottish Community Drama Association gives all kinds of advisory help to the scattered branches.

From the Border to the Highlands and remote island villages, eager students of the theory and practice of stagecraft are to be found. The long distances between the centres have led to the development of educational work on rather different lines from those followed in England and Wales. Producers' Schools are naturally rarer, and teachers' tours, made by experts to the local groups, usually take their place. But a three-day school was held last April at Oban for those in the west of Scotland who could not attend the more advanced course provided by the summer school at St. Andrews. This venture, well prepared and organised, attracted students from rural districts in Argyll, from Inverness, Bathgate, etc., and the sessions proved very helpful to all.

The number of Scottish entrants for the annual Drama Festival is very high, in proportion to the population; and the trophy offered by the B.D.L. was gained by one of these teams, competing with the whole of the United Kingdom, this year. It will be remembered, too, that a play which excited the interest of critics and public lately, 'The Sleeping Clergyman', was the work of a Scotsman, and reached the London stage after performance by the Malvern Players.

On Sunday next, October 5, at 5.10, is to be given the first of a series of three Biblical Dramas which have been adapted from *At the Well of Bethlehem*, by Mona Swann. The first of these is the story of 'Ruth the Gleaner', the second will be 'David the Shepherd' (December 2), and the third 'Mary the Mother' (December 30). The tales are told in the words of the Bible and the characters are a Narrator, who reads the narrative of the Bible story, and men and women who take the *oratio recta* parts. No attempt is made to modernise the language or ideas of the Bible, but the story is presented as simply and faithfully as possible, letting the words speak for themselves. In the first tale the characters are Naomi; her two daughters-in-law, Ruth and Orpah; the Chief Reaper; Boaz, and another of Ruth's kinsmen; and an Elder.

*Drama, February, 1934

The Cinema

Shopping for Pictures

By C. A. LEJEUNE

I DON'T know any other commodity that is bought with such recklessness as entertainment. People who would never dream of buying an inferior brand of tinned fruit or of being put off with poor quality silk stockings don't even trouble to find out which brands of pictures are likely to give the best value for their money. They go to the first picture that comes, either because they like the seats in that particular theatre or because they happen to be passing and see the posters. And then they are surprised and a bit aggrieved if the programme is not exactly what they want.

But why in the world should it be? When you think that there are between four and five hundred full-length pictures put on the market in this country each year, of every type from continental problem dramas to westerns, it isn't altogether remarkable that you will come up against a bad film now and then. In fact, as things are—unfortunately—the odds are about three to one against your hitting by chance on a good one.

Learn to Choose the Right Films

But why should you leave it to chance? This haphazard way we have of picking entertainment has always been a puzzle to me. Why do we do it? You wouldn't walk into a library and pick up the first book from the shelves, without looking to see whether it was a love-story or a thriller, or perhaps a volume of plays. But that is what we are doing with the pictures all the time. I don't say that it is as easy to choose the right pictures as it is to choose the right books. For one thing, it means a certain amount of personal inconvenience. It may mean taking a penny 'bus fare instead of walking round the corner, or giving up a theatre where the seats are soft and the organ comes up out of the ground on a thing like a cakestand, for a theatre where the seats are hard and they spray you with a disinfectant that makes you sneeze and cry. And it means using your wits too—remembering names, and sometimes making notes of films you see reviewed, so that you don't miss them when they come to your local theatre three or four months later.

Pictures are fugitive commodities, and I don't know any other form of entertainment, except perhaps radio, where you have to be so quick on the mark. That is an added reason for learning to shop for pictures, for most theatres change their programmes every three days, or every week at most, and once you have missed a film there is very little chance of picking it up again.

Every week there are about ten or eleven films released in this country, and on an average three of these are really worth seeing—perhaps that is pitching it a little high, but we will be generous and say three. Most of the daily and Sunday papers give lists of the best releases in their film columns, and you will find complete lists, with details of cast and director and so forth, printed in the 'fan' magazines. It is always a good plan to check up these lists beforehand, decide what you want to see, and then look for the theatres where they will be shown.

Pictures Can Be Known by their Trade Marks

Make up your mind which film you would be most sorry to miss, and go to see that one first, in case of accidents. You must snatch the first opportunity of seeing the film you have chosen because it's very likely to be the last too. Yes, you may say, that's all very well, but how am I going to find out from the posters, or even the lists in the papers, exactly what are the best pictures of the week? Well, I'm afraid that is where your bit of work comes in. You must learn to know pictures by their trade marks, and the only way you can do it is by experience and observation. If you believed the posters, every other picture is 'the Greatest Heart Throb of All Time', or 'the Most Powerful Screen Epic of the Year'. And though I should like to suggest that you believed the critics, I know quite well that we can't really choose your films for you. We can only give you an idea what the new films are about, and what *we* think they are like, but in the end you must decide for

yourself which programme is likely to give you the best value for money.

It is not quite so difficult as it sounds. There are not more than a dozen film-producing companies with a regular output of any size, and most of those companies turn out a pretty consistent type of picture. You very quickly get to recognise the different brands, not only by the stars and directors, but by the sort of material they use, the general look of the photography, the particular way they tell a story. Anyone who is used to looking at pictures—really looking at them, not just letting them flicker along in front of him—can walk into a theatre in the middle of a feature, and say 'Universal', or 'London Films' or 'Metro-Goldwyn', and nine times out of ten he will be perfectly right.

Have a look at pictures for a few weeks with this business of identification in mind. Get to know the chief producing companies and the sort of things they do: find out which of them, on the whole, give you the best all-round entertainment. All the big firms provide one release a week, all the year round, and it is quite interesting to work out what you would do if you were like the American exhibitors, who have to book with one firm for a whole year's product, without seeing any of it in advance. If you could only see pictures from one company, which one would you choose? Think it over. Remember which stars each company has under contract, and what sort of pictures they have been in the habit of giving you. Do you really like British or American films best? Are there any stars you *must* see, or any types of pictures that you would avoid at any cost? Luckily, the booking system in this country gives you a pretty catholic choice, but you can learn quite a lot about your taste in pictures if you imagine for a moment that you are limited to films from one firm.

I don't know whether you are in the habit of reading those lists of names at the beginning of a film that are known as 'credit titles'. I find that many people think they are just put in as a bit of studio back-patting—and sometimes I confess they are. But you can find out a great deal from those titles once you learn to read them correctly: not only the cast, but the producing company; the camera-man and the story-writer—both important people in the quality of a film—and above all, the director.

How Many Film Directors Could You Name?

Picture audiences certainly know more about directors today than they did four years ago, but on the whole their names still mean much too little. How many directors could you name off-hand? Chaplin . . . Lubitsch . . . De Mille . . . Korda . . . Victor Saville. Who else? Clair . . . Griffith. How many more? About a dozen with luck. Have you ever heard of Al Santell? Or Irving Cummings? Or John Blystone? Yet you must have seen lots of their pictures. Probably half the population of this country has seen the film 'The Invisible Man', but how many of you can say who directed it?

It is always worth while noticing the director of a picture, whether it is good or bad, because the chances are that the same characteristics will appear in all the other films made by the same director. I don't mean that the quality will be the same; every director has his ups and downs and is also very much at the mercy of his material. But, within limits, the style is likely to be the same—there will be characteristic touches in the handling—the way the actors behave, the way the story is told. A Cecil de Mille picture, for instance, is always a Cecil de Mille picture. Basil Dean and Herbert Wilcox are two directors who hardly ever speak out of turn. King Vidor is another director with an obvious style of his own, and you can always have a pretty good guess what Mamoulian or Von Sternberg is going to do. But the most consistent of all—probably the most reliable director of fiction films in the world today—is Frank Capra.

I wonder how many of you know anything about Capra besides his name? It is quite easy to have missed him, for he is not a director who has ever been much given to personal pub-

licity. And yet he has been making pictures for more than twelve years, most of the time for the same company, Columbia. He was born in Italy, but went to America when he was quite a small boy, and by the time he was ten years old he was selling newspapers on the street in New York. (Have you ever noticed, by the way, how all the best people seem to have started their careers by selling newspapers?) Anyway, what with the newspapers and an odd job or two as a waiter, Capra managed to earn enough money to get himself to California and into the film business. He wrote short stories and helped to direct them. He was gagman for Hal Roach, and made comedies with Harry Langden. He learnt everything there was to learn about studio work, and hacked through every possible sort of melodrama and romance as a director for Columbia.

Success of 'Lady for a Day'

But even when he had made a whole host of successful pictures like 'Flight' and 'Submarine' with Jack Holt, and the historic 'Platinum Blonde' with Jean Harlow, and 'Forbidden' with Barbara Stanwyck and Menjou, he never really got into the limelight. I think perhaps his films were too easy to understand—they had no mannerisms, and they didn't look consciously clever in any way. He was considered 'quite a good director' in Hollywood, but the public didn't really know him at all. It wasn't until last year, when his picture called 'Lady for a Day' came romping home with all sorts of medals, that both the public and the film people began to sit up and take notice. All of a sudden even the most celebrated stars began to think that it would be rather nice to play in a film directed by Mr. Capra, and other studios beside Columbia suddenly decided that they would like to have him on their payrolls. So Capra had various offers—and Columbia finally agreed to loan their now fashionable director to Metro-Goldwyn for one picture, in exchange for Robert Montgomery, who was to play the 'bus-riding reporter in Columbia's own film, 'It Happened One Night'. But just before the time came to lend him, Metro cast Montgomery in a 'bus picture of their own—'Fugitive Lovers' we called it over here. This apparently provoked Columbia. They refused to have Montgomery, and demanded Metro's prize possession, Clark Gable. It was too late then to rewrite the script that had been prepared for Robert Montgomery, and Clark Gable—whom no one had ever considered as a light comedian—had

to step straight into the part and play out of character for the first time since he became a star.

I don't know what would have happened to Capra—and to Gable—if 'It Happened One Night' had been a 'flop'. But it wasn't. It was not only a success, but an uproarious success. It played to full houses and repeat engagements all over America. The fans liked Gable, and the studios suddenly began to think the world of Capra. For you see, he had not only made a good picture, but a good picture which did tremendous business at the box-office—and that's the sort of merit that even Hollywood can understand.

The Public Gets the Films It Will Pay For

I've told you this story about Capra, because I want to emphasise the importance of the box-office, not to detract from it. The only indication of public taste that is worth a hang is the amount of money that goes each week into the paybox. Pay to see good films and you will go on getting them; neglect them, and you most certainly won't. For you see, the theatre owner is a practical man, whose one object is to sell entertainment. It doesn't make any difference to him which films he shows, so long as the customers are satisfied. But it stands to reason that if a theatre is packed out for—let us say—Tom Walls in 'A Cup of Kindness' or Richard Tauber in 'Blossom Time'—the exhibitor will book more Tom Walls or Tauber pictures. And it goes further back than that. The studios will make more Walls and Tauber pictures. They have got to. It is a definite order from the public, just as clear as if every member of the audience wrote it down in black and white.

So do make up your mind what films you want to see—find out the best brands of entertainment and go to the theatres where you can get them. Remember that the whole industry is one long system of supply and demand. The box-office controls the studio, and the public controls the box-office. It doesn't matter how much Mr. Goldwyn or Mr. Schenck or Mr. Charles Chaplin may talk about their ideals and ambitions. It's your one-and-sixpence that decides what pictures they are going to make—and whether they are going to make them at all. It is a very comforting thought when next you read about 'the Greatest Screen Epic of All Time', to remember that there wouldn't be any screen epics, great or small, if you stopped putting your hand into your pocket.

Points from Letters

Owing to the pressure upon its space, THE LISTENER is able to publish only a selection from the correspondence which it receives. Correspondents are asked to write briefly and to the point, and are reminded that name and address must always be given, even where their publication is not desired. THE LISTENER, of course, undertakes no responsibility for the views expressed in these columns. Preference will be given to letters which do not employ a *nom-de-plume*

Self-Subsistence Groups

THE LISTENER of August 22 quoted Professor J. W. Scott's reference to C. B. Phipson's advocacy, many years ago, of the principle that groups of producers should exchange their products directly between themselves or by tokens current between them; should abstain from buying, by national or international currency, goods from remote producers who would never buy from them in return; and should rather buy or barter with those who would buy or barter with them.

The system, one assumes, has been tried, but only superficially and merely as a local super-imposition upon the existing economic system. Are not present conditions highly favourable for the testing of its possibilities to supplant (in large part, at least) the existing system? Agriculture suggests itself as the first field of trial. For agricultural products the producers get little and consumers pay much. Moreover, it happens that innumerable landowners find themselves with unprofitable land and time upon their hands. They still have the desire, though no longer the opportunity, to play a directive role in agriculture. Phipson's system suggests at least the possibility of their playing that role once more, but more usefully than ever before. A village and estate, under a landowner with directive ability, might form an experimental group for the purpose. As regards meat, bacon, vegetables, dairy produce and beer, it could obviously become a self-supporting community—probably for home-made flour and bread, and possibly for (beet) sugar. Coal, tools and

machinery must come from outside, but now that electric power is (or could be) available everywhere, the economic local production of leather, boots, woollen and linen textiles, and of many other machine-products, cannot be dismissed as impossible.

Concerning those things which must come from specialised industrial areas, an organised system of exchange might be effected between groups in agricultural and industrial areas, if the formation of groups in industrial areas should prove feasible. Whatever else be obscure, certain evils are manifest in the present state of things: (1) workers, meaning thereby those who actually produce, have to sell their products for what they can get—for money, regardless of what that money may procure them in return; (2) they—small farmers not less than industrial 'hands'—have become mere powerless puppets as producers, having no control over the disposal of what they produce; and (3) they are shut off from man's greatest satisfaction—that of playing an intelligently creative, self-respecting and appreciated part in life. This spiritual deprivation (and not physical hardships, bad as these may be) is the chief cause of the profound and universal discontent among civilised mankind today.

This letter simply suggests the putting of Phipson's ideas into experimental practice in such a way as to test their possibilities for development. The obvious course is for a landlord, or landlords, with constructive ideals to consult with Professor Scott and other authorities interested in the matter. Perhaps the Government would lend assistance. When so much time and

effort is spent on purely palliative schemes, surely some would be well devoted to an experiment which might start the regeneration of our economic life.

Pulborough

C. F. T. WHITE

Mis-spent Youth of Aviation

I have just read an article on 'The Mis-spent Youth of Aviation' in THE LISTENER of September 5. In assessing the technical progress made during the War for an expenditure of one thousand million pounds, no distinction is made between the expenditure on research and expenditure on manufacture. The greater part of this sum was spent on the quantity production of standardised designs, some of which—the Avro 504 and the D.H.9A.—are still in use. It is only the money spent on research and development that is comparable with the cost of the peace-time activities of the public and private laboratories from which technical developments emanate.

Although, as Mr. Crowther states, the modern light aeroplanes and air liners are the first aircraft to fulfil other than military functions, these are nevertheless operated for the most part by flying clubs and air lines subsidised for political reasons. The number of private owners of aircraft is insignificant—some two or three hundred—and in any case is limited to the wealthy.

Southsea

G. P. KIRK

Pictures of Russia

I have waited to secure the endorsement of my own investigations by unimpeachable authority before venturing to draw attention to the grave inaccuracy of your caption to the picture of Russian peasants searching for wheat. You state that 'the harvest itself is, of course, the property of the State'. Sir John Russell, the Director of the Rothamsted Experimental Station, who has only just returned from his second tour of the Russian agricultural districts, definitely contradicts this. His own report is that 'on the collective farms the payments to members are made partly in kind and partly in money, and the members are allowed to sell a large part of the products in the markets'. Sir John is convinced of the success of collectivisation for the production of grain. This bears out my own experience in the Ukraine and the Northern Caucasus, where I found special shops supplying every kind of commodity thronged with peasants buying goods with the proceeds of their collective farming. These shops had been erected since my first visit in 1932.

Ipswich

JOHN LEWIS

Mr. Bishop, who writes on behalf of the Friends of the Soviet Union Committee, says that he has an intimate and recent knowledge of present-day Russia. Will he tell us if there exists in Russia any Committee analogous to his own, e.g. Friends of Fascism, or Helpers of Hitler; and if he thinks that such an organisation would be allowed the same freedom of utterance that his own enjoys in England?

Coltishall

V. N. GILBERT

Psychology and Social Needs

Professor Aveling's interesting lecture on the application of psychological science to social needs is a signification of the danger of intellectual achievement without spiritual understanding, against which a warning is needed at this time. Professor Aveling states that this science is extremely popular today judging by the widespread use of its technical terms; but such popularity is no true criterion of its real and lasting value; on the other hand, it is rather an indication of a passing craze for novelty. It appears that we require another Lord Macaulay now to deal with Professor Aveling in the same way as did that Victorian Essayist with Robert Montgomery, in the same spirit, and for the same interest.

With reference to the claim of the modern psychologist to cure physical troubles, the danger is this: that the treatment is limited to the diagnosis of the 'psycho-neurose', and the revealing to the patient of the particular repression resulting therefrom. Is it claimed that this is sufficient to effect a cure? I maintain that it is not, and that the ultimate result is to side-track the patient, leaving him more helpless and confounded. More realistically than does Dante, the psychologist shows up the reality of the nether regions—and their torments, but of himself he can do no more. His little knowledge is dangerous!

There is a way by which a man suffering from inhibition due to the mind's reaction to the soul consciousness of sin can become aware of his shortcomings, and by God's grace find a greater liberty. It is the way of true repentance, or inward turning of the soul to God. When, by this turning, the con-

sciousness as it were is turned inside out, *understanding* comes of the distance of earth from heaven—the mental from the spiritual—and the necessity for a saviour. In this repentance a promise is received by the opening to perception of the heaven-consciousness in the mind, by which promise resulting in what is biblically termed 'faith', the man (mind) is armed to run the race that is still before him. Without this promise he can do nothing; he is still at the mercy of his old identifications.

Here is the vital difference between psychological treatment and spiritual healing. One has the power to diagnose the unconscious cause in relation to a physical effect, but has no power to align this cause—the soul—with the fountain from which it received its life—God. The other, in bringing the consciousness of sin, also gives at the same time the awareness of a saving grace within—He Who for us men and for our salvation came down from heaven. This Mediator accepted, the latter mode of healing becomes operative, flowing down through the process of natural association in all forms and in all ways of life, amongst the uneducated and the educated: it is a given power of attraction to the particular influence required. True healing cannot be confined to mental formulas because it is spiritual. It is not a subject for universities or degrees. Not by study or recourse to the mental clinic can it be obtained, but it can be received by turning to God.

Chichester

A. W. BERRY

Mesmer and Christian Science

In your issue of September 19 there appears a review of a book entitled *Mesmer*, by Margaret Goldsmith, in which the reviewer states that Christian Science is the 'flowering' of the ideas of Mesmer. In this he is incorrect. Christian Science is the rediscovery of the divine principle and rules which underlay the teachings and practice of Christ Jesus. He utilised the power and presence of God, divine Mind, to heal the sick, reform the sinner, and raise the dead, and He described His method and its results when He said, 'If I cast out devils by the Spirit of God, then the Kingdom of God is come unto you'. On the other hand, Mesmer employed the carnal or human mind, which St. Paul described as 'enmity against God'. Christian Scientists acknowledge Christ Jesus as the Way-shower, and are endeavouring to follow in His footsteps. From this it will be seen that Christian Science did not originate in the teachings of Mesmer.

London, W.C.2.

CHARLES W. J. TENNANT

Christian Science Committee on Publication

Methodists and Smugglers

Mr. A. K. Hamilton Jenkin tells your readers of a 'devout Methodist' who was a famous smuggler. I suppose he has read that most remarkable pamphlet, John Wesley's *A Word to a Smuggler*, written in January, 1767. A more striking appeal I have never read: it was widely disseminated amongst the Methodists. In a number of his letters Wesley instructs his preachers to remove from membership those who do not 'solemnly promise to deal in stolen goods no more'. In 1776 he claimed that his *Word to a Smuggler* was 'plain and home', and had 'done much good in these parts' (Chatham).

Leeds

C. PHILLIPS CAPE

Van Eyck and the Spaniel

I am glad Mr. Williams has raised the question of this little dog. Sir Robert Witt's article made me more convinced than ever that van Eyck never painted it at all, but that to satisfy the whim of some woman or child it was added by an inferior hand at a later date.

Ditchling

GERARD T. MEYNELL

An Author Both Sides of the Atlantic

It is to be hoped that nobody would be so foolish as to go all out to run down the United States and its literature; but its literature, excepting in rare instances, can hardly be compared with that of Europe. Everything American, besides being merely what we call foreign—just as we speak of French, German or Spanish things as being foreign to whatever country in which we live—has, most unfortunately, a peculiar taint, probably best described by the use of the name Barnum. Showmanship overrides everything in the United States. One has only to read Sinclair Lewis' *Babbitt* and compare it with *Scènes de la Vie Future* by Georges Duhamel, to realise this. Hence U.S.A. present-day literature is impregnated with showmanship, publicity and advertising. The 'Barnum' spirit pervades all.

It is from within this particular atmosphere that Mr. Ford Madox Ford composed and forwarded his trade against English

literature, British writers, and London socially. We have it from Mr. Ford that, in the United States, literature (and publishing) is just as much a trade as fruit-canning or soap-making. One can well believe it if one remembers the 'potted classics' of the late Elbert Hubbard, and the host of writings which has followed this and similar lines of so-called literature. But there is a difference between literature and mere writing, a distinction probably too fine to be caught in the atmosphere of Fifth Avenue. The sort of stimulus which Mr. Ford feels he needs for his trade may hardly be that desired by a serious Englishman or Frenchman engaged in literature. The fully-occupied mind of a person seriously engaged in literature, and not in mere writing, does not find stimulus in street corner or café-bar conversation, either in New York or London, though such may afford recreation or amusement. The value, at times, of isolation seems to be entirely ignored by Mr. Ford. Has he never read *Wuthering Heights*? Perhaps one day Mr. Ford will realise that America's greatest shame—entirely owing to this fatal 'Barnum' spirit—is that the rest of the world does not, and cannot, take her very seriously.

Larchant

GEORGES CLARRIÈRE

'On the Cro'jack Yard'

On opening THE LISTENER of September 26 I saw at once that a mistake had been made in the caption under one of the photographs on page 537 illustrating my talk entitled 'Life on Board a Windjammer Today'. 'On the main yard' should, of course, read 'On the cro'jack yard'. The mistake was due to my haste in sorting out some 200 miniature Leica films in time to catch THE LISTENER before it went to press. In the enlarged picture, which your blockmaker has skilfully made, it shows that my photograph is clearly taken up the mizen mast, as the main and fore yards are also both visible—the ship heeling over on the starboard tack.

Chelsea

CECIL L'ESTRANGE MALONE

Pigmentation of the Yolk of Egg

With reference to the statement by Dr. A. S. Russell on the subject of the pigmentation of the yolk of egg, I should like to point out that this is not due to carotene as he affirms, but to xanthophyll. Xanthophyll and carotene are usually associated in plants and plant products in the proportion of about two to one respectively. Although chemically very similar, carotene is a precursor of vitamin A, but xanthophyll is not. All the carotene normally consumed by the hen is changed into vitamin A in the liver and unless carotene is supplied artificially in large amount it does not occur in the egg yolk as more than a small trace. Xanthophyll cannot be utilised in this way and accordingly it is deposited in the body fats, where it produces a yellow tint. It also colours the legs and beak and sometimes the feathers and impregnates the egg yolk. As Dr. Russell points out, other fat soluble pigments—red, green and blue—will stain the body fats and egg yolk in the same manner. Xanthophyll is in fact a waste product.

A deep pigmentation of egg yolk is significant as showing that the bird that produced it has been fed on a diet containing greenstuff or maize which is also rich in vitamin A. If, however, the birds are supplied with cod-liver oil instead of greenstuff as a source of vitamin A, colourless yolks can be produced which are nevertheless rich in this vitamin. It would seem that the physiological processes responsible for the transference of vitamin A to the egg also effect the concentration of the fat soluble xanthophyll in the yolk.

Tibbenham

VICTOR G. HANES

Musical Compositions and Interpretations

I think Dr. Grace might find that my attitude towards music (which he discussed in his article last week) is fairly popular. Perhaps a few sentences concerning my position will suggest to Dr. Grace, if history cannot, that music is 'qualified' by other people besides musicians.

The scores of the great mass of music do not come my way, and I can't spend my listening hours wondering whether the B.B.C. is allowing 'lies' to be broadcast in their music; my scepticism is used for other purposes. So I must take a lot for granted, and I make no apology whatsoever for being, as Dr. Grace so delicately sneers, on happy terms with some music. That, no doubt, makes obvious the dulness of my musical perception, but I'll go further. I should not be able to feel horror at a lush interpretation of Chopin if I had no knowledge of the piece played, for Chopin had his treacley moments. Neither could I bear to hear repeatedly a gramophone record, even though it had been passed as perfect by the composer of

the music played. I confess that I enjoy a subtle difference in interpretation, so long as Mozart is not made to sound like Mendelssohn or modernity.

Regarding the two passages of music Dr. Grace includes in his article, I can't see why the pianist should wish to play the first instead of the second, unless he knew there were fierce critics in the audience ready to burst at the first sign of sugary sentimentalism. The bit that Schubert wrote doesn't sound so sharp, efficient, modern: perhaps he had a premonition that his music would go into musical comedy and the films, and the thought of his creations fetching more than ninepence a time (the *élite* know all about value, of course) might have made him full of grace and pose.

West Wickham

CHARLES OXFORD

Setting the Intellectual Pace

May I just assure Mr. Barnes, in reply to his letter in your last issue, that in using the word 'intellectual'—which has come down in the world rather sadly nowadays—I was thinking of 'intellect' in the highest possible sense, as for instance 'understanding' is used in the Book of Proverbs. Whether I claimed more for day-schools than I ought to is another matter; but I should be sorry to be thought to have claimed less than I did.

London, W.C.1

R. F. CHOLMELEY

Wireless Group in Plymouth

May I enquire, through the medium of your correspondence columns, whether any Plymouth reader would be interested in the formation of a local Wireless Discussion Group? I should be pleased if anyone interested would communicate with me at 3 Balfour Terrace, Stoke, Plymouth.

Plymouth

A. R. HOSKIN

Litter in the Parks

In the city of Antwerp there are notices in French and Flemish in the public gardens as follows: 'These gardens are under the protection of the Public'. I asked an attendant how this acted. 'Why', he said, 'if any person leaves any litter, someone stops him and points to the notice', and it is effective. Would such a notice be of use in the parks here?

Wimborne

S. CLEMENT RYLEY

'Red Saunders'

We notice that Dr. A. J. Cronin, in his broadcast talk last week, referred to 'Sinbad's' *Red Saunders* as a novel. This is not correct, and we should be glad if you could state this fact in the next issue of THE LISTENER.

London, W.C.2

GEORGE G. HARRAP & CO., LTD.

Key to Nationalities on pages 551 and 552

The Nationalities represented in the picture on page 551, illustrating Lord Raglan's talk, are 1, Australian; 2, Danish; 3, British; 4, German (Alpine); 5, German (Nordic); 6, Norwegian; 7, Dutch; 8, French; 9, Finnish; 10, Belgian; 11, Polish; 12, American; 13, Spanish; 14, Russian; 15, Italian; 16, Austrian. The crowds shown on page 552 are A, French (Aral-Photo); B, Russian; C, English.

The arch shown on page 478 of THE LISTENER of September 19 was incorrectly described as the Arch of Titus. The photograph in fact represented the Arch of Constantine, the first Christian Emperor of Rome.

The Listener

The B.B.C. invites applications for the post of ART ASSISTANT to work principally for THE LISTENER. Qualifications include good general knowledge of Art, and experience of the resources of agencies, galleries, libraries, museums, etc. Starting salary, according to qualifications; minimum £260 per annum (contributory Pension Scheme). Applications with full details of qualifications should reach the Establishment Officer, Broadcasting House, London, W.1, by Monday, October 8. Envelopes and applications to be marked 'Art Assistant'.

*The Listener's Music***B.B.C. Symphony Concerts: 1934-1935**

THE reduction of the number of concerts by a third—twelve against last winter's eighteen—is a reminder of the unaccountability (or smallness) of the London musical public. For if Queen's Hall can be filled for forty nights on end with people so avid for orchestral music that many hundreds of them will consume it standing (undeterred by heat waves), one would expect an even larger public for the symphony concerts. The programmes are of greater interest (except so far as the least sophisticated listeners are concerned); the playing is far better, for the obvious reason that the orchestra is fresher and the music more adequately rehearsed than is possible during the 'Prom' season; and the price of tickets for the area and balcony is the same for both sets of concerts—indeed, an area ticket for the symphony concerts is the better value in that it provides a seat instead of standing room. The free-and-easy character of the 'Proms' is a factor, of course; but in every other respect the symphony concert audience gets so much more for its money that one wonders if Promenaders as a body realise how much they lose by a system of musical dietetics that consists of an eight weeks' gorge followed by a ten months' fast. At all events, the poor attendance at last winter's orchestral concerts given by the B.B.C., the Royal Philharmonic Society, and other organisations, throws a revealing light on the size of the public for music compared with that for the theatre, the cinema, the dance hall, dirt and dog tracks, and other forms of evening recreation. No matter what hopeful indications show themselves from time to time, musicians will find little cause for satisfaction until London—and indeed every large city—can maintain in addition to umpteen cinemas at least one permanent all-the-year-round concert hall. 'Where shall we go tonight?' 'I fancy some music. What's on at the Queen's Hall?' . . . 'So-and-So conducting the X.Y.Z. Orchestra in a good programme: let's go'. The size of the genuinely musical public of this or any other country will be a matter for humility rather than pride until dialogue of that sort can be heard on any evening in the year. I don't know whether the case for the symphony concerts has ever been put to listeners in a homely and persuasive way by means of a talk: if not, the Music Department and the Talks Director might with advantage lay their heads together during the next few weeks.

The season that begins on October 24 seems to be of more than average interest. For the public that is less concerned with music than with 'stars' there is ample provision. The conductors are Beecham (twice), Wood (twice), Boult (five times), Harty, Weingartner, Stravinsky and Coates; instrumental soloists are Casals, Flesch, Gieseking, Backhaus, Dohnanyi, Hess, Huberman, Heifetz, and Schnabel. Singers are fewer, appearing only on some of the choral nights. (Apparently the prima donna is no longer a necessary point of relief in an orchestral concert, the spot-light now having shifted to the conductor's rostrum.)

For those who wish to hear familiar masterpieces, nine of the programmes make good provision with at least one or two old favourites. Indeed, on November 14, the hall should be filled with 'Prom' enthusiasts, if they can somehow be roused from their hibernation, for Wood will be in charge of a scheme consisting of the Brandenburg No. 6, the 'Haffner' Symphony, the Haydn Violoncello Concerto, 'Don Quixote', and 'Siegfried's Journey to the Rhine'. It will be interesting to see if this typical 'Prom' programme will draw any considerable number of typical 'Prom' patrons to hear (comfortably seated) a performance superior to that heard by them at the same price (uncomfortably standing) a few weeks ago.

The more musical public that likes a considerable proportion of new and unfamiliar music will welcome the opportunities presented by October 24 (Delius' 'Mass of Life'), October 31 ('Also sprach Zarathustra' and Scriabin's 'Prometheus'); March 6 (a Handel organ concerto transcribed by Harty and three Berlioz numbers, including the fine Funeral March from 'Hamlet'), and March 27 (Schubert's so far unheard Symphony in E, orchestrated by Weingartner from the composer's complete plan, the MS. of which is in the Royal College of Music library; and Liszt's 'Dante' Symphony).

There are seven novelties. On November 28 a Stravinsky programme will bring the first English performance of the melodrama 'Perséphone', conducted by the composer, the other items being the not yet very familiar Capriccio for piano-forte and orchestra and the 'Firebird' Suite. Yuri Shaporin's Choral Symphony in C minor appears in a Russian programme conducted by Coates. (Shaporin is apparently one of the younger school of Russians, for I can find no reference to him in Sabaniev's comprehensive *Modern Russian Composers*, published in 1927.) On February 6 will be heard the Scherzo from an unfinished symphony by Holst (an exceptionally good programme this, as it contains also Elgar's Introduction and Allegro for Strings, Beethoven's Fourth Piano-forte Concerto, with Gieseking as soloist, and Brahms' No. 2).

In an attractively 'mixed bag' on March 20 are three first performances in England—a Malipiero Symphony, the same composer's transcription for string orchestra of a Frescobaldi Toccata, and symphonic extracts from Alban Berg's opera 'Lulu'. The last novelty will be heard at the final concert on April 10—Vaughan Williams' new Symphony in F minor.

Clearly there can be no complaints on the score of lack of enterprise.

Here are a few more points from the programmes. The 250th anniversary of Handel's birth (February 23, 1685) is to be celebrated on February 20 with a programme conducted by Beecham: 'Acis and Galatea', a Concerto Grosso, and the Coronation Anthem, 'The King shall rejoice'. The absence of a similar celebration of Bach (who was born a few weeks later in the same year) has been commented on in the press; it has been erroneously assumed that the B.B.C. overlooked the occasion. A likelier reason is that Bach's music figures prominently in programmes during the rest of the year. The omission of Bach from the scheme has, in fact, already proved to be the surest way of drawing attention to him—an odd state of things that recalls a remark of Cato quoted somewhere by Carlyle: 'So many statues in that Forum of yours! Might it not be better if they asked, "Where is Cato's statue?"' The Handel concert will be welcome; it ought to mark the beginning of the revival that has been so long talked about.

The performance of Holst's 'Planets' complete (October 31) will be the first, I imagine, for a long time. After the first success of the work, there were people who found seven planets too much of a galaxy, the result being a neglect of the majority in favour of a couple of the more attractive. A performance of the whole is overdue.

'Plan your listening in advance', says the cover of *The Radio Times*. The advice ought to apply to the winter no less than to the week, so readers should send for the complete programme. They should then go further, and, whether they listen at Queen's Hall or at home, should obtain the analytical programmes, available a week before each concert*. Planned listening will then be intelligent and appreciative listening as well.

HARVEY GRACE

*Obtainable at Queen's Hall or at Broadcasting House, 6d. (post free, 7½d.)

The Riddle of Race

(Continued from page 552)

some would equate the first Celts with the bringers of iron, Professor Childe is inclined to equate them with the bringers of the late Bronze Age culture. It is generally agreed, however, that the Celts were not established in Britain for many centuries before the coming of the Romans, and that they were never more than a succession of bands of conquerors who imposed their language and culture upon the earlier inhabitants. As I said, most of the present-day British speakers of Celtic are Mediterraneans, but it is improbable that there were any Mediterraneans among the original Celts.

I have dealt at some length with the question of race, partly because of its particular interest at the present moment and partly because even educated people display the most astonishing ignorance with regard to it, but it must not be supposed that it covers the whole field of anthropology, or anything like it. Human biology, of which the study of race forms a part, is no more than one-third of the science. The other two-thirds are taken up by social anthropology and technology. Social anthropology studies man through the workings of his mind, his customs and his beliefs, while technology deals with the works of his hands, his tools and weapons, clothes, houses and boats. The former includes a good deal of psychology, since it is the business of psychology to explain why man thinks as he does. The official psychology concerns itself almost exclusively with civilised people, but anthropologists are interested in the mental processes of the entire human race.

In the nineteenth century it was supposed that beliefs and customs which are found over most of the globe are the result of mental processes which are natural or instinctive, and that the human mind always reacts to its surroundings in the same way. According to the school which has found its greatest exponent in Sir James Frazer, the superstitions of Britain and of the Australian aborigines are similar because the minds of the British and the blacks are fundamentally the same, and must therefore react in the same way to the same stimuli. This view is, of course, at the first glance, and even at the second, very reasonable, but it has two great flaws. It explains the similarities in thought but not the differences in thought, and it assumes the existence of natural stimuli for which there is no evidence. Let us take an example. In parts of England and Germany, as well as in Central Australia, it is believed that if you cut yourself with a knife, or run a splinter into your foot, you need not bother about the wound as long as you keep the knife or splinter clean, or alternatively that you can cause an enemy's wound to become fatal by fouling the weapon with which you have wounded him. The fact that this belief is so widespread convinces the school of Frazer that it is the natural way to think, but how can a form of thought which is so far removed from the truth and so completely futile be natural? By what possible mechanism could nature fill the mind of man with foolish lies? And if nature fills the mind of man with foolish lies, how is it that the minds of all men are not filled with the same lies? For they are not. It is not merely that people are educated out of superstition, but that we often find superstitions which are prevalent over half the world and unknown in the other.

Take again the belief in ghosts. It seems to be connected with belief in the dual soul. Queen Elizabeth has one soul in heaven, while the other perambulates the library at Windsor Castle. The belief in the dual soul was important in Ancient Egypt. It is important, as Mr. Driberg told us in his paper on Ancient Worship, in Central Africa, and is also important among the Red Indians. Can anyone really suppose it natural to believe in a dual soul?

These and similar considerations have led during the last thirty years to the formation of what may be called the diffusionist school of anthropology, of which the most prominent figure is Sir Grafton Elliot Smith. The diffusionists hold that original thinkers are extremely rare, and that people believe stupid things, or for the matter of that sensible things, not because it is natural to think them, or because they have evolved them in their own minds, but because they have been taught them. While new ideas are rare, old ideas, or ideas that have once obtained a hold, are very persistent and also very mobile. It seems probable that just as Britons go about the world today spreading a knowledge of electricity, and spreading at the same time such foolish and irrational beliefs as that thirteen is an unlucky number, so in past ages people whose history is lost moved about the world, spreading a knowledge, let us say, of corn-growing, and at the same time a belief in ghosts and the dual soul. Sir Grafton Elliot Smith and Dr. Perry hold that everything began in Egypt, but the view more generally held is that the cradle of civilisation was the whole region between the Nile and the Indus, and that advances were made in various parts of this region, and transmitted by conquest or commerce.

The crux of the whole controversy is whether the American civilisations, those of the Mayas and Incas, were derived from

Asia or evolved independently. This is one of the cases in which social anthropology and technology are closely connected, since there are what appear to be parallels between the beliefs and the manufactures of China and Mexico, and also what seem to be striking differences. The question cropped up in connection with Mr. Cooper Clark's paper on Aztec manuscripts. So far as the Old World is concerned, the making of paper by beating bark is accepted as a Chinese invention. The process was also known in Mexico. Did the Mexicans invent it, or did they derive it from China? They certainly were not a very inventive people, since they never invented the wheel. Before Columbus the wheel was totally unknown in America. This fact provides a double-edged argument. The diffusionists say that if invention is so easy and the Americans had invented so much, they would surely have invented the wheel, to which the reply is made that if the Chinese had crossed the Pacific they would surely have taken the wheel with them. The question is in many respects puzzling, but it is a striking fact that, so far as I am aware, every single parallel between the cultures of the Old and New Worlds is a parallel between the western parts of America, and the nearest parts of Asia and the Pacific Islands. The suggestion that there was transmission across the Pacific is much strengthened by the fact that there is nothing whatever to suggest transmission across the Atlantic.

The question of diffusion crops up again in connection with the megaliths, or large stone circles and other monuments, of which there are a number in Aberdeenshire. It is generally agreed that the practice of erecting these monuments arose in the Mediterranean, and their distribution suggests three lines of advance. Their range extends firstly down the Red Sea to Ceylon, Further India, Polynesia and Central America; secondly round the coast of Spain and Portugal to Brittany, the British Isles, particularly their western parts, and Norway; and lastly along the north and west coast of Africa. Mr. Keiller, in his paper, maintained that they were always connected with the dead, and there is a great deal of evidence to support this view. Many attempts have been made to give these monuments an astronomical significance, but the evidence for this theory is extremely slight, and the opinion of archaeologists in general is against it.

In her paper on Albanian cradles, Mrs. Hasluck showed a number of specimens varying from a simple board to a rocking cradle of the type familiar to us. She suggested that the Albanians had evolved the rocking cradle from the board. To this I demurred, for three reasons. In the first place there can be no natural urge to make cradles, since over the greater part of the world they are unknown; secondly, it is unlikely that a backward people like the Albanians would invent such a complex piece of furniture; and thirdly, in my view the original rocking cradle was a boat, and the mountaineers of Albania have no boats. What I think probably happened is that the Albanians borrowed the cradle from some more civilised people, and while some of them have gone on making it properly, others have got lazy or careless, and allowed it to degenerate.

This question of degeneration is one to which not enough attention is paid. It is a popular belief that all human communities are progressing, and that we are ahead of the Fijians because we have been progressing rapidly while they have been progressing slowly. Like all popular beliefs this is quite devoid of foundation. All the evidence suggests that throughout human history most cultures have been degenerating. When archaeologists dig up ancient cities, it is the rule rather than the exception for them to find the best pottery at the earliest levels. When Europeans first came in contact with Maoris, Eskimaux and others, they found that they had already lost the art of carving some of the ornaments which they still prized. Certain of the Melanesians have lost the art of canoe-building, which was known to their grandfathers, and the long voyages which the Polynesians must have made some centuries ago are beyond the capacity of their descendants. At the time of the Spanish conquest of America, the civilisation of Mexico had apparently been going steadily downhill for over a thousand years. In our own culture the progress is only in certain directions. While the sciences are going up, the arts are going down. This question of degeneration is one of the many of which very little is known, and which it is the business of anthropology to study. And there are many more. The great fascination of anthropology is that, in comparison with some of the older sciences, there is so little that is certainly known, and it therefore offers a very wide field to the student and the investigator. It is a science in which knowledge is increasing rapidly, and in which opinions have therefore to be changed frequently. What was written even twenty years ago is completely out of date. The large attendances at the Anthropological Section of the British Association are evidence of the increasing interest in this new and important science.

Books and Authors

The Return of the Hero

Marathon and Salamis. By Compton Mackenzie. Davies. 5s.

The Cid and His Spain. By Ramón Menéndez Pidal. Murray. 15s.

Bertrand of Brittany. By Roger Verceel. Routledge. 10s. 6d.

Barlow's Journal. Edited by Basil Lubbock. Hurst and Blackett. 18s.

The Hundred Days, 1815. By Philip Guedalla. Davies. 5s.

The Baton in the Knapsack. By Laurence Currie. Murray. 12s.

The First War in the Air. By R. H. Kiernan. Davies. 5s.

Reviewed by G. K. CHESTERTON

IN the last century, two very queer things happened to the Hero. First, the scholars said that he never existed, because he was remembered by so many people in popular gossip. The radiant rationalism of Greek letters made it hard to maintain that Themistocles never existed or that the Battle of Marathon never occurred. They took it out on poor old Homer, who was proved to be an anthology. But when the same sort of things and men continued to occur in the Dark Ages, the learned let themselves go. Some said St. Patrick never lived; some still say King Arthur never lived; I am sure they were within an inch of saying King Alfred never lived, he is so obviously another version of the myth of King Arthur. Similarly, we must all agree that Henry VIII never lived; as he is obviously another version of the fairy-tale of Bluebeard. For that matter, Napoleon, who is also on my list, was proved by Archbishop Whateley to be a Sun Myth; but I fear the Archbishop was sadly frivolous. Anyhow, the Cid, a Christian warrior born before the Norman Conquest, could easily be proved a legend.

Well, this first phase of scepticism is exploded everywhere. A sceptic like Dr. Bury has proved the reality of St. Patrick; and a great scholar like Don Menéndez Pidal easily proves the reality of the Cid. Even in the Greek example, Mr. Compton Mackenzie notes the germ of this disease of denial; it is the absurd notion that dramatic events do not occur because they involve coincidences. But dramatic events do occur and often are coincidences; like the death of Nelson and the name of his ship Victory. And the Hero becomes epic when people recall one special incident that had this quality. Achilles had doubtless done other things besides quarrel with Agamemnon; and Roderigo the Cid, as his biographer shows, did a vast number of other things besides quarrel with his own king. But the stories are epics that have the same single point; the idea of a great warrior withdrawing his help; and showing what he can do by doing nothing. An epic describes an action; but these describe an inaction. But quite certainly the Spanish story happened; quite probably the Homeric story happened. Heroes do happen.

Then came another phase of doubt about the Hero. The sceptics no longer said that the Hero was not a historical character. They only said that the Hero was not a hero. One way of proving this was to say that all praise of him came from his friends; and that they were partial. So the scholars looked up the opinion of his enemies; his enemies being supposed to be impartial. A case can be made this way: Mr. Mackenzie notes that there was doubtless something to be said for Persia; there was a great deal to be said against Sparta; but that does not make Leonidas less of a hero. The case of the Cid is even stronger. He fought against the Moors; but all record and tradition show that even in this war he was chivalrous and just; and his other virtues, such as his devotion to his wife, now shine as clearly in history as in legend. But these writers could not believe that an eleventh-century man, and a Christian at that, could be anything but a barbarian. They therefore hunted through all the Moorish chronicles for any momentary expressions of annoyance among the defeated Moors. This is as if, in the other case, we discounted all the adoration felt for Napoleon by his own soldiers, and believed nothing but a few obscure libels written in London about Boney as a bogey who ate children. Napoleon may not have been so noble as his followers thought; but he was not so black as he was painted by hack liars who had never been within a hundred miles of him. The theory of the impartiality of slanderers will have to be abandoned in its turn.

There is no space to review these books properly; I am only noting how they all illustrate one principle, patchy as their subjects seem. If the Cid was the epic, the rather primitive hero of the Dark Ages, Bertrand du Guesclin was the romance of chivalry, the knight of the later Middle Ages. He was a very interesting man, of whom more should be known in England; the rival and equal of the Black Prince. He was short, strong and ugly; so ugly that his own mother had a horror of him as a monster. He was also by temper ferocious; but in spite of all he came to figure as a sort of Sir Galahad. This truly Christian miracle was worked by a Jewess, who had become a nun and a sort of governess; one of those obscure women who have made history by making Heroes. He was famous for protecting the peasantry in war; and he repressed very cruel brigands; but no scholar has yet looked up the diaries of these thieves and torturers, to make a case against Bertrand du Guesclin.

Now I took next something so utterly different as a book of sea voyages, centuries later, because we must represent somehow the fact that a third kind of Hero had appeared after the opening of the New World at the Renaissance. The mediæval Hero had a Quest; the more modern Hero had an Adventure. The knight was sent to find something; the adventurer was sent to find out what there was to be found. It was a novelty in which English seamen excelled; and we naturally delight in its freedom and its humour. But it is well to remember loss as well as gain. The last French feudal wars may have been no better than the piracy and slave-trading of the Spanish Main; they could not well be worse. But the paradox remains; that in the foulest feudal carnage, individuals did have ideals not only high but delicate. The sea captains, even when they were occasionally good men, were never idealists.

After this interlude of pure adventure, the return of Napoleon is rather like the return of the Cid. Whatever we think of him as a Christian, he stood for all Christendom; as when it warred with Islam. Mr. Guedalla writes of this international Hero excellently as usual; but he probably likes the internationalism more than the heroism. I do not blame him for not being merely romantic. I like Heroes but not Hero-worshippers; though I very much like to know what Heroes worship. But Mr. Guedalla is realistic; and if he has a Hero, it is rather Wellington than Napoleon. Yet he cannot take from the Hundred Days that epic sense of an Imperial Hero for an instant risen from the dead.

Oddly enough, my last little book, on the flying force, revives the Hero problem; discussing the French custom of giving greater glory to individual flyers and fighters. If our civilisation takes the unexpected turn it has almost always taken I think I can guess at the sequel. Hundreds of years hence some brave Frenchman will appear as a legendary Hero, like Bellerophon riding the horse with wings. Thousands of years hence, in some quieter civilisation, sceptical scholars will prove, not only that he never existed, but that nobody ever flew. Then they will change their minds, and call him a coward, because any fool can fly—or fight.

But this is the wiser moral; there was a time when ships going to America were as new and incredible as aeroplanes going to the moon. But that does not mean merely that we must go beyond the moon. After both adventures men will return to the Quest; to the central problem of finding in our own civilisation what the Cid and Napoleon were really seeking; peace and justice at home. Otherwise, civilised man will only be a very agitated athlete with a weak heart.

The Listener's Book Chronicle

Secrets of Siberia. By Pierre Dominique Hutchinson. 10s. 6d.

THE STUDENT OF AFFAIRS in Russia now has an almost unmanageable quantity of printed material to deal with concerning European Russia, but reliable information concerning Asiatic Russia is still exiguous. This tour of Siberia by a well-known French writer was made in 1933 and published under the title *Siberie Rouge*. Although it appears in its English version after a year's lapse, it has considerable value because the author makes no pretence of doing more than collecting facts bearing on two points—the economic significance of the new industrial towns, such as Magnitogorsk, that are arising in Siberia, and the standard of living of the population. M. Dominique tries to be scrupulously fair to the communist experiments which he describes: but the facts are too strong for him. His book is a record of conditions which, if they were widely known, would horrify even those whose sensitivity to suffering has been dulled by the brutal records of the world's post-War history, and the deluge of propaganda which has accompanied it from all quarters. M. Dominique describes interview after interview with Siberian peasants, industrial workers, officials and others. Everywhere it is the same story. Seventy or eighty roubles a month (a rouble is equivalent to about 9d. in English money) is good average pay for adults. Most of it is spent on bread, for little other food, except occasional onions and cucumbers, is available. The population is divided up into classes, some privileged, others not. The privileged classes, including officials, foreign specialists and some industrial workers, get enough to eat: the rest live on bread. And for what purpose is all this sacrifice? M. Dominique is impressed with much of the industrial achievement, but points out how incomplete and wasteful it all is. Nearly all the new factories are unfinished or not functioning properly: what is three parts done is counted as finished. On the outskirts of the untidy scrapheaps which surround the new factory centres are to be found huge barrack dormitories constructed to give temporary accommodation to the workers till the permanent perfect housing scheme is completed for them. But the temporary tends—through red tape and officialdom—to become the permanent. Buildings are occupied before the doors and windows, water supply and drainage are completed. And then comes forgetfulness, and the enrolment of one more 'model village for workers' in the statistics of achievement of the U.S.S.R. M. Dominique is patient; he expresses no surprise, he does not judge what he sees. 'Let us not be surprised', he concludes, 'that their (the Russians') rulers have always been warders. Work, discipline—these are things that have always had to be imposed upon the Russians. A penitentiary—such is what they have always had for their Fatherland'.

Liberty Today. By C. E. M. Joad. Watts. 2s. 6d.

In the world of today when the value of democracy, of liberty and of reason appear to be regarded more and more critically, especially by the younger generation, nothing could be more opportune than the publication of Mr. Joad's book; nor, may we add, could any treatment be better devised for the purpose for which it was written, *viz.* to embark on a 're-statement of the time-honoured case for liberty, mainly for the sake of the fresh generation of young minds to which the arguments which seem to us wearisome and stale are fresh and vital, and by whom the case that seems to us to have been fought and won so often has to be fought and won again'. The whole book is a plea most convincingly worked out, to show that liberty is a 'good' in itself; and that democracy is the only form of government which can tolerate its implications. He shows the enemies of liberty in the world of today; the imprisoned minds of the populations of the authoritarian states, the symptoms, on however small a scale, of a possible approach of a similar disease in this country. He looks for causes for this failure of liberty and of democracy in many different directions; in the helplessness of the individual before the growing size and complexity of the modern State, in the scale and often unlooked-for results of great economic movements; in the growth of centralisation of government and in the difficulties engendered by the clumsiness and dilatoriness of the parliamentary machine; in the fact that, even in a politically free country, a mass-made mind is engendered by popular education, by the press and by wireless; in the decline of religion which

leads to the desire for a leader to compensate for the loss of a personal God. The argument that political liberty is valueless until economic liberty is attained is met by Mr. Joad by showing how essential political liberty is to those who want to work for any change in public opinion. Again, to counter the argument that government has become so complex that it must be left to experts, he points out that the function of experts is limited to an elucidation of means and that it is for a free public opinion to determine values and ends.

Perhaps the finest part of the book is that in which Mr. Joad puts forward the case for liberty as the 'air of the spirit' and in which he describes its denial as the denial of all that makes life worth living. In defending intellectual freedom he argues that the case for toleration is founded upon belief in human rationality. Men, he holds, are so constituted that they will in the end embrace truth if they are only given a reasonable chance of perceiving it. It is refreshing to find in an age when the very existence of reason as a determinant of human action is doubted Mr. Joad is not only prepared to place it first himself, but also to recognise what he calls a 'new reasonableness' in the younger generation, and not only in the younger generation in this country. In discussing the way in which liberty and, with it, democracy, can be safeguarded, he points out that democracy has not yet succeeded in arousing sufficient devotion in its citizens to cause them to devote to public affairs either the interest or knowledge that is required. He calls on all those who care for democracy to insist that men should be educated in citizenship, and to all who care for liberty, to insist that men should be educated to be rational. It is only, he maintains, on condition that citizens are so educated that democracy can survive. It is difficult to overpraise the sincerity and lucidity of this book; it is admirably planned and finely reasoned; we are glad that its low price will bring it within the reach of nearly all.

Georges Braque. By Carl Einstein. Zwemmer. 30s.

This book has a significance far beyond its nominal subject. In the first place, it is a unique literary experience. Mr. Einstein pours forth a torrent, not merely of words (there are 90,000 of them), but of images and ideas. It is a dizzy structure that stretches and contorts the French language in a manner entirely novel and, at times, vertiginous (*e.g.* 'L'art avait trop longtemps végété dans les lits paresseux de l'hérédité fangeuse; disons franchement que l'art, emmailloté dans des bandages gangrenés recouvrant d'innombrables fractures, se prêtait dans un domaine de conservatismes à sommeils multiples'). But there is no denying its compelling force; the welter has wealth; it even has a general unity and a conscious direction. In the second place, though Braque is the nominal subject, the book is actually a philosophy of modern art. Never before have the metaphysical assumptions and consequences of the contemporary movement been described in such detail and with such brilliance. The ordinary small talk of art criticism is swept aside. There is to be no question of attempting to convey, in words, the emotive quality of Braque's work; painting and speaking are two entirely different things. And as for questions of technique, it is all so much 'shop', studio jargon of no general interest. The author even goes so far as to say that he would never have bothered to write about Braque if he had only been a 'good painter'—this quality has no more importance than the talent of a good shoemaker, or of a 'poinçonneur de tickets émérite'. The significance of Braque is something altogether different—something involving a radical transformation of facts, a new spatial vision.

Mr. Einstein is a deterministic critic, an exponent of the method of dialectical materialism. The work of art as an isolated æsthetic experience has no significance for him; he prefers to regard it as a vital expression of social forces. The history of art becomes a study of the conditions which give birth to the work of art, not merely a simple analysis and description of types. The developments which have taken place in contemporary art are an inevitable outcome of the transition from individual to collective values in the social structure. In this process the appearance of cubism is a phenomenon of the greatest significance, and it is as a typical cubist that Braque is considered in this book. One may legitimately doubt whether Braque himself has ever been conscious of any of the aims and aspirations attributed to him; but such a detail does not trouble the deterministic critic. The artist works by intuition, not by will. He knows that he must discard the old images of reality before he

can create the images of a new conception of reality. The first phase of cubism is accordingly destructive, though Einstein is prepared to find in it all manner of secondary significances—even the sexual. But the tectonic element in early cubism, what it retains of form and measure, is a residue of old prejudices, a last safeguard against the unknown, the classical fear of ecstasy. An artist like Braque has passed beyond these limits, into a world of hallucination: the conscious or reasoning self is entirely destroyed, or superseded, and the painter expresses a visionary reality, devoid of any mundane associations. The æsthetic criterion yields to the force of the creative invention; the picture becomes a 'psychogramme'. One might ask whether a work that ceases to be æsthetic does not thereby cease to be art; and wonder how an art which is primarily an instrument of derationalisation can ever become the synthetic expression of a proletarian culture. One might raise many objections to Mr. Einstein's views, but a mind so prodigal would have a ready answer.

Ah, Wilderness! and Days Without End

Two Plays by Eugene O'Neill. Cape. 7s. 6d.

Mr. O'Neill, it is really superfluous to say, has always been in the great bulk of his work much more than a simple maker of entertainment. Years ago he was described by a friendly critic as an agnostic in search of redemption, and in the various plays of his three main phases as romantic, naturalist, and symbolist he has, like John Loving, the principal character of 'Days Without End', made the rounds of not a few modern philosophies and 'isms'. Whatever he may write demands to be regarded not only for its intrinsic interest but for its place in its author's odyssey. In this latter connection, 'Days Without End' is certainly the more engrossing, if the less purely entertaining, of these two plays. John Loving is a man so deeply divided within himself that the author chooses—rather characteristically, but, one feels to the end, rather unnecessarily—to portray him on the stage as two individuals, the loving, unhappy John and the bitter, sardonic Loving. John 'must find a faith—somewhere', and in the last act overcomes and kills his other self at the foot of the Cross and the figure of the Crucified. Whether Mr. O'Neill would offer this as his own solution is, naturally enough, not declared, but there is an intensity in the account of John's earlier fruitless quests, and in his final surrender and return (for he, like his creator, had been born and bred a Catholic) a fervour, almost an ecstasy, combined with an almost total absence of any real regard for the psychological difficulties of the case, which go far to force the conclusion that it may well be so.

'Ah, Wilderness!', on the other hand, shows Mr. O'Neill in unusually objective mood. In substance it is a trifle, but a pleasant one, a study in American small-town life and, more especially, in adolescent love (or self-love), a period piece of nearly thirty years ago when in Connecticut—as elsewhere—Oscar Wilde and Swinburne were unmentionable and even Bernard Shaw hardly less dubiously regarded. The characters are treated on the whole with a tolerant, almost a benevolent, understanding—sympathetic father, protective mother, amiable if old-maidish aunt, unstable uncle, and, especially, Richard, aged seventeen and discovering love, poetry, socialism and disillusion all together. The scene in which he seeks 'to go the pace that kills along the road to ruin' may be set beside that, equally realistic, in which he seeks, equally fatuously, to act the heroic lover, but the family groupings are certainly the best in their vein of a restrained sentimentality.

Thomas William Dunn. Sidgwick and Jackson. 5s.*

Thirty-five years ago a Cambridge undergraduate walked out one day to Milton to call on a retired schoolmaster who had been a college friend of his father's, and there underwent one of the formative experiences of his life. The old man talked to him and made him realise for the first time that the exact scholarship towards which for years his intelligence had been nominally (how nominally!) directed, was no merely intellectual achievement, but an integral part of morals and even of religion. That schoolmaster was Thomas William Dunn, then newly retired from the headmastership of Bath College, to which he had gone as its founder some twenty-five years before, after a few years of marked success under Percival at Clifton. Any classic who was at one of the old Universities in that quarter of a century can easily remember today with what admiring amazement scholars regarded the long series of successes won by Bath under Dunn, suc-

cesses utterly disproportionate to the size and tradition of a new and unendowed school. The secret of Bath was the secret the old man expounded to his friend's featherheaded son. It is the under-song of the story of Dunn's life and work now published by the Committee for his Memorial. 'Τῆς κοινῆς τῆς δαίμονος', he at one period made his boys write at the foot of every exercise—'I have obeyed my conscience', or, in other words, 'I have scamped nothing'. 'Error', he said, 'is of the nature of sin'. A hard saying, but the habit of mind so implanted made not only fine scholars, but men of rooted integrity in any walk of life. Dunn had, too, as the reminiscences of old Clifton and Bath pupils printed here bear witness, with many entertaining anecdotes, a native genius for teaching, unconventional, incalculable and dramatic, the whole being sublimated by his habit of setting the supreme value on character. The want of endowment brought Bath College to an end a few years after Dunn retired; but there is not really much to regret in that. The School's short and marvellous flowering was the work of one man, and even had it lived it must have lost its unique quality. A legend in his lifetime, Dunn is now a tradition. This welcome book will give the tradition fresh life, and may convey to a younger generation of teachers and taught who never heard his voice some echo of the nobility and flaming earnestness of one of the great Victorian prophets.

The Russian Journals of Martha and Catherine Wilmot, 1803–1808. Edited by the Marchioness of Londonderry and H. M. Hyde. Macmillan. 21s.

Every generation has an unfailing interest in the customs, habits, clothes and conversation of the generations that preceded it. The more detailed, the more trivial in a sense, the record is, the deeper the interest. Martha and Catherine Wilmot, children of an Anglo-Irish family living at Cork, were not especially gifted but were indefatigable writers of letters and diaries. Martha went to Russia as the guest of the famous Princess Daschkaw. The Princess conceived for her an admiration that bordered on infatuation. Martha's visit lasted nearly six years and would have lasted longer except for the outbreak of war between England and Russia. Catherine paid a shorter visit with the unsuccessful ambition of bringing her sister home. The Princess had become her 'Russian mother' and could not be denied. The letters give a vivid and picturesque account of all that happened to the sisters almost day by day. Owing to the influence of the Princess Daschkaw they were received in Court circles, saw the Emperor and Empress, besides mixing in the society of the rich merchant class. Martha was taken by the Princess to visit her various estates, so that she was able to see and comment on the life of the peasants. She found them in many ways not unlike the Irish peasants. There was a common note of melancholy in their character, as in their music; that she recognised as familiar from her life in Ireland but never completely understood. Materially she found the Russians much better off than the Irish. 'The very poorest people here have resources and likewise abundance which our poor know nothing of, and the peasantry of this country really and truly enjoy not only the necessities but the comforts of life to an astonishing degree'. Of the masters she had a poorer opinion, finding them 'shallow pated animals' though gifted as a rule with five languages. The quantity of diamonds worn by the nobility greatly impressed her. She guessed at a 'brutality and savagery underlying the surface, but like so many others did not seem to realise that it is vain to judge Russia by Western standards. Of the surface life she gives an entertaining picture, regularly calling serfs slaves and being genuinely astonished when a young girl given her by the Princess did not welcome the change but pined for her mother. Her sister Catherine has a more mordant pen. She lays great stress on the fact that the French veneer, so fashionable at the time, was simply a veneer and a thin one at that. In reality she found the Russians boorish and rude. Position and influence at Court was their only ambition and, according to her, manners and expressions of opinion were ruled by this alone. There was a loss of pride in Russian culture and traditions. They still belonged, she thought, to the twelfth century, and she compares the country to a 'clumsy romping ignorant girl of 12 years old with a fine Parisian Cap upon her head'. Again she says that the extravagance of the nobles was leading to the quick passing of landed estate from them to the merchants 'who are in Russia neither more nor less than Pedlars and shopkeepers'. But she adds that as the Military Power was the sole standard of Honour so that the humblest-born Captain took precedence of the noblest lieutenant, she

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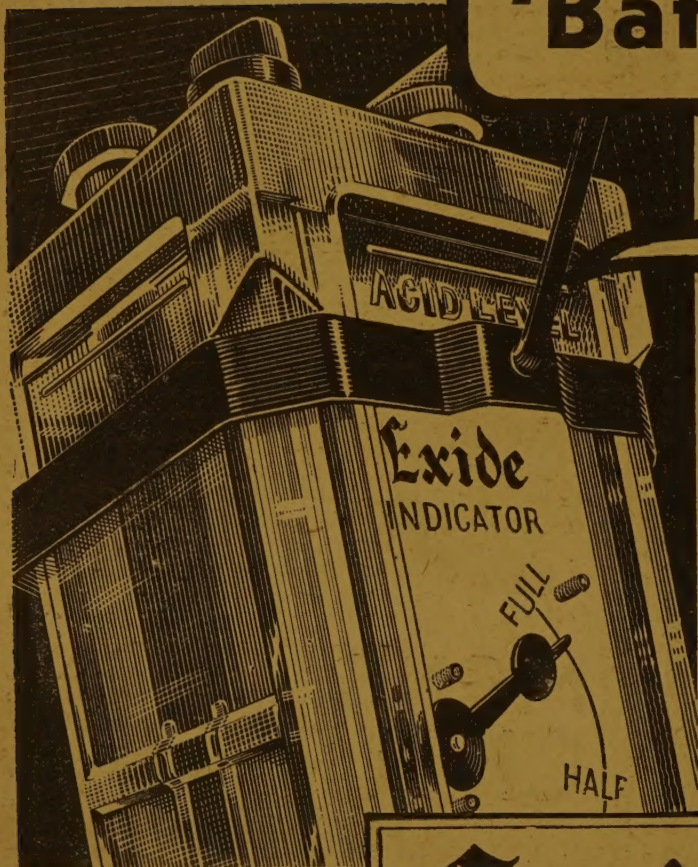
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had not met anyone imbued with the 'high spirit of Aristocracy'. This she thought removed the danger of a catastrophe, since the despotism of Peter the Great had in fact brought about the most complete republic that the world contained. But a republic in which good and bad were 'synonymous with favour and disgrace'. It is interesting to read her emphatic opinion that progress must be slow if it is to endure, that any rapid change would lead to disaster. One disconcerting fact that she noted was that though a married woman had not complete power over her person she retained it over her fortune. There is an amusing description of a wedding in which the bathing of the bride and bridegroom was an important feature: indeed it is surprising to read what an important part baths played in Russian life. Besides the journal and letters of the sisters there are included two entertaining letters from Catherine Wilmot's Irish maid. There are several illustrations and the volume is a sumptuous one.

**To Portugal. By Douglas Goldring
Rich and Cowan. 12s. 6d.**

Portugal may well become the playground of Europe. Under a 'dictatorship without tears' as Mr. Goldring calls it, the country has during the last few years made astonishing strides in the direction of order and progress, while losing none of its smiling charm and character. Since the Peninsular War little has been published in English on Portugal (although there are indications that this shortage is in a fair way to being made good) and those travel writers who have visited the country have followed the beaten track, if such an expression can be used where no tracks have yet become unduly worn. They arrive in Lisbon by sea, visit its environs, and risk an expedition to Evora or even, thanks to improved communications, to the Algarve. They then make their way northwards by road or rail to Oporto, taking Tomar, Alcobaça, Batalha, Leiria, Coimbra and Bussaco in their stride, and traverse the verdant Minho province to Vigo, where they re-embark for home. They thus see little but the coastal zone, and one may seek in vain in their books for any first-hand, sensitive account of the snowy heights of Estrela, the arid *charnecas* of Alentejo, the blue distances of Beira Baixa and the broom and cistus-covered uplands of Beira Alta and Tras-os-Montes. Their example is faithfully followed by Mr. Goldring, who disarms criticism by admitting that his principal aim is to be of service to the intending traveller and that much of his information was gathered before his own journey. He says all the right things about all the right places, so much so indeed that we are often at a loss to know which of the places he describes he has himself visited. He makes one or two discoveries: Portinho de Arrabida, that tiny fragment of Greece on the Atlantic, and Nazaré with its fascinating colony of fishermen. He gives himself away rather badly in 'Tras-os-Montes. 'The summits of the Montezinho range, north of Braganza, are covered with eternal snow'. They rise, in point of fact, about as high out of the surrounding plateau as the South Downs out of the Sussex Weald and are, in summer, considerably hotter. We must also correct a mischievously inaccurate statement that 'in the Spring of 1933 some hundreds of English visitors to Estoril who had booked return passages had to wait for weeks before they could be disembarked'.

**Four Walls. By Laurence Whistler
Heinemann. 3s. 6d.**

**Beyond the Sunrise. By James Bramwell
Heinemann. 3s. 6d.**

**Poems of Ten Years. By Dorothy Wellesley
Macmillan. 8s. 6d.**

In comparison with many of his contemporaries, Mr. Whistler, who, according to his publisher, is only twenty-one, is not at all a difficult poet. He is not even a very modern poet, if modernity is to be measured by the poet's endeavour to coin metaphors out of a mechanistic world or to express in his poetry the torturings of a social conscience. Mr. Whistler's best poems are love-poems. This in itself is a considerable tribute these days, since one of the most disturbing things about the modern poet is his inability to write an authentic love-poem—as if he had grown almost too cerebral to be other than cynical, or else merely physical, in his expression of passionate love. Mr. Whistler is neither a cynic nor a romantic: he writes of love, as Donne wrote of it, with abandonment and yet without any suggestion of a false idealism.

Crush your lips to mine
And have your beautiful way, and I with you.
Let the heart's time-piece race and beauty spend
In pleasure, that is dying,
Until we fall in a dead sleep and know
The tenderness of waifs in a tiny dawn.

In the title-poem, in 'Dialogue', and in 'The Tempest', this promising ability in tackling a theme shunned (to their loss) by so many moderns is seen at its best. Mr. Whistler's weakness, so far, is a too great fondness for a particular kind of word: 'lit', 'fist', 'vigil', 'tiny', 'crumple', 'holy', are examples. A poet's strength is not so much in an idiosyncratic vocabulary as in a genius for giving all words their full mintage value: he must be able to build his house anew with the old, battered bricks. It is two years since Mr. Whistler published his first book, *Armed October*, and the advance is very encouraging: he is contemporary in a good sense of the word, allied to no obvious school or fashion, and genuinely creative.

'Men that love waves', writes Mr. Bramwell, 'have wisdom in their eyes'; and sailors are to be considered lucky because they have no roots 'stretched downward and clogged with earth'; whilst in yet another poem they are to be taken as a type towards which (presumably) we should try to approximate:

... with firm and even steps
Let us glide towards rain and blinding mist
With the fine effrontery of clean white bows
To quell the swelling mutiny of waves.

From which it may be gathered that the poet here is adventurously minded, though what he is adventuring after, or why, is not quite so clear. There is a lack of inevitability, of drive, in his verses; yet he is not facile, and his sincerity is obvious.

Lady Gerald Wellesley's poems of ten years (1924-1934) make an imposing volume: indeed, if industry were a passport to good poetry she would stand high among the Georgians. She has a quick eye and a well-stored mind, and the convincing word seems to come easily to her. But these things are not enough. The final effect of these more than three hundred pages is of a continual sight-seeing holiday, in the company of one unmistakably cultured and sensitive. There are poems about Crète at sunset, wines, moths, spring in Norfolk, donkeys in the East, and so on; all very well informed and charming, but rather too much of a good thing in the end, so that one begins to long for a little room (even without a view) and some hard thinking.

**Anywhere for a News Story—Personal Narratives of
Thirteen. Bodley Head. 7s. 6d.**

The special correspondent of our day is inclined to think that next in interest to the great news story itself is the story of how he went after it, and the welcome given to the B.B.C. series of such adventures would seem to prove that the news-getter is not mistaken in so thinking. In this volume we have a baker's dozen of narratives, introduced by the acknowledged leader of English war and special correspondents, Mr. H. W. Nevinson, whose own contribution is the story of the siege of Ladysmith. That brilliant journalist of the last generation, G. W. Stevens, is quoted as saying, 'War is a necessary evil, necessary for the war correspondent'. But it is noticeable that not all by any means of these chronicles have to do with the battlefield: indeed, a majority of readers might well agree that some of the most exciting adventures are concerned with happenings of quite another kind. Mr. Blumenfeld, it is true, tells of revolution in Haiti, but his best pages deal with yellow fever in the Southern States. Mr. H. A. Gwynne gives a diverting account of Ashanti royalty, while Sir John Foster Fraser describes a remarkable journey across Manchuria in 1901, three years before the Russo-Japanese War brought that region into the news of the world. Mr. J. L. Hodson describes some amusing interviews with the great; Mr. C. J. Ketchum tells of the luck which enabled him to scoop the world with his story of the burning of the Four Courts in Dublin; and Mr. S. R. Littlewood recalls his stalking of the northernmost voter in these islands. The photographer became long since an indispensable ally of the special correspondent, and he can now command all the mechanical resources, including wireless telegraphy. Far otherwise was it a quarter of a century ago, when, as told here by Mr. Bernard Grant, first pictures were obtained of the appalling Messina earthquake. The thirteen adventurers make a varied batch. Some of them tell their stories without trying to give them a literary dressing. Others, such as Colonel Lionel James and of course Mr. Nevinson, combine the grace of the artist with the gusto of the news-getter. And so long as that combination is possible in the daily press, so long will the English 'special' be the glory of his craft.

New Novels

The Huge Shipwreck. By Kathleen Freeman. Dent. 7s. 6d.

The End of a Childhood and Other Stories. By Henry Handel Richardson. Heinemann. 7s. 6d.

The Treasure of the Sierra Madre. By B. Traven.* Chatto and Windus. 7s. 6d.

Reviewed by EDWIN MUIR

MISS FREEMAN is a writer whose gifts have never been recognised at their true worth, and *The Huge Shipwreck* seems to me to be the finest novel that she has yet written. Her style is so transparent that what she says always seems to be simple; but actually she is concerned with the subtlest of themes: the secret windings and deviations of passion. Had she treated this subject less calmly and surely her reputation would stand higher now, and her art lower. It is not that she is not intensely concerned with her theme; but she is never involved in it, never swept round in the gyrations of the passion she describes, as so many novelists seem to think it their duty to be. The spectacle of an author being carried away often carries the reader away too by sympathy; the result is a form of popularity. Miss Freeman does not carry us away; she helps to bring us back to ourselves. She clears a space where we can stand and see everything unrolling before us, and have a clear and undisturbed view. She does this by virtue of a passion quite different from that which she is describing: a passion of contemplation that fulfils itself in something which might almost be mistaken for passionlessness.

The Huge Shipwreck is a story of conflicting fidelities which work themselves out in the lives of the characters from childhood to womanhood (for Miss Freeman is mainly concerned with women). Estella, who is the chief figure, forms a deep attachment while still a child to an older girl, Veronica, and this influences the rest of her life. The two girls are sent to the same school, where Estella meets Sadie, a friend of Veronica, by whom she is both repelled and attracted so powerfully that this too influences the rest of her life. Sadie is madly in love with Toby Ungerville, who is in love with Veronica. Toby and Veronica become engaged, but at the last moment Veronica throws him over for the man she really loves, and Sadie gets him to herself, as she had always said she would. But their life is unhappy, and in a fit of despair Sadie at last leaves him, and he falls to Estella. With her he seems to be happy for a while, but then one night he shoots himself. The central figure in the drama is Veronica, who, while herself unmoved and carefree, ruins the lives of the three people who in different ways depended on her. The plot gives very little idea of the story, for the really remarkable thing in the book is the beautiful fidelity, the exquisite sense of proportion with which the relations between the characters are traced. These relations are in the last resort indefinable, so Miss Freeman does not analyse them, she merely indicates them; but her art is so measured and just that the effect is one of perfect clarity. All her women characters are beautifully drawn, Sadie being perhaps the best of them all. The men are not nearly so good, and Toby, the most important of them, is little better than a romantic lay figure. But it is the women that matter (Toby is an excuse), and in describing their lives Miss Freeman gives an intense feeling of forces moving behind the events, that is to say of design and meaning, which is rarely found in contemporary novels. This feeling of design does not spring from any underlying dogma, but from intuition: it is part of a vision of life which sees the subtlest movements of passion and simultaneously the whole as it will work itself out. The structure, the style and the temper of this remarkable novel are all fine and all of a piece.

Miss Freeman traces the destinies of four people: in the collection of short stories she has called *The End of a Childhood*, 'Henry Handel Richardson' shows the same opulence of invention, the same power to stock a whole world with characters, which makes *Maurice Guest* and *The Fortunes of Richard Mahony* so remarkable. In this capacity to create characters in the round and create them on a large scale, she seems to me to be superior to any other novelist writing today. And she does not even need a wide canvas; most of the stories in this volume are quite short; yet the characters in them are completely shaped, even though they appear only for a few moments. Probably the story which will be found most interesting is the one entitled 'The End of a Childhood: Four Further Chapters in the Life of Cuffy Mahony', which is a pendant to *The Fortunes of Richard Mahony*. The author here does not keep such a distance with her characters as Miss Freeman does; she sees them at close range, so that nothing in them escapes her; but

her scrutiny is so understanding and just that it produces an effect of detachment. 'The End of a Childhood' tells the story of the Mahony family after Richard Mahony's death. The mother struggles on for a time as postmistress in a little country town in Australia. Then she has a fall, injures her leg, is operated on, and dies under the operation. The family is broken up, and Cuffy and Lucie, his sister, are separated. This fragment is quite short; but it is as good as anything in *The Fortunes of Richard Mahony*: it is written with superb ease and sureness, and has the palpable excellence of that book. It is followed by a group of stories called 'Growing Pains: Sketches of Girlhood', which are uneven. But one of them, a story of the adventures of three young girls who try to sleep in a narrow bed on a hot night and finally give it up and retire to the veranda, is filled with the most pungent realistic humour and is, I think, unlike anything else that the author has written. It is a brilliant little trifle. The second part of the book is made up mainly of stories about Germany. Probably the best two are 'Life and Death of Peterle Luthy' and 'Mary Christina'; both of them stories about death, in the one case of a child, in the other of an old woman. They are exquisite in feeling, but the note of pity is perhaps a little overstressed.

The author of *The Treasure of the Sierra Madre* is a very fine storyteller, but he gives the feeling that while telling his stories he forgets their intrinsic meaning in the excitement of following out the separate episodes. The theme of the present book is the corrupting influence of gold on those who search for it. Herr Traven sends out three men into the wilds of Mexico to look for gold. They find it and immediately begin to distrust one another. But then bandits intervene, and their bloody history becomes so exciting that the author forgets everything else. Thereupon he returns to his theme, but throws it up again as soon as the next exciting incident catches his attention, rushes in full career after it, and then once more returns to his theme. Every scene and action that he describes is vivid; but they seem to be strung together by nothing much more than his extraordinary gift for storytelling; and the result is that the story itself loses the meaning that it was clearly intended to have. So the best episode in the book is a train hold-up by bandits, which has only an indirect bearing on the story. The best piece of narrative development, on the other hand, is the description of the gradually intensifying mistrust between the two remaining gold miners when they are conveying their treasure across the mountains to the nearest town. But the story is too far advanced by then for this fine passage to have its proper effect. How good Herr Traven is can be seen from the following passage describing the train hold-up:

It was twenty minutes or a little more to the next station. And now the train was in full career and the attendants were busy with the tickets for the passengers who had just got in, and who were blocking all the doors on to the corridor, where they had been standing from the start as though they were not going to sit down until they had found themselves good seats.

The next moment, without a word or any warning, they pulled rifles and revolvers from under their blankets and opened rapid fire. It was directed particularly on the soldiers, whose rifles were between their knees or leaning against the sides of the carriage, while they studied spelling books in order to learn to read and write, or munched their supper or dozed.

The firing lasted only about ten seconds; by that time the coach was a shambles and all the soldiers were either dead or at the point of death.

And so Herr Traven can go on for ten or twenty pages at a time, giving one vivid detail after another, none of them unnecessary. He has the essential gift of a storyteller: that of relating how things actually happened and completely ignoring how he would have liked them to happen. This makes the book worth reading; but there is a lack of unifying power in it which keeps it from being quite first rate.

Mr. Muir also recommends: *Men of Good Will—Book V. The Proud of Heart*, by Jules Romains (Lovat Dickson); *Island of Refuge*, by John Fisher (Dent); and *Chalk and Cheese*, by Richard Vaughan (John Miles)—all at 7s. 6d.

*Translated from the German by Fasil Creighton